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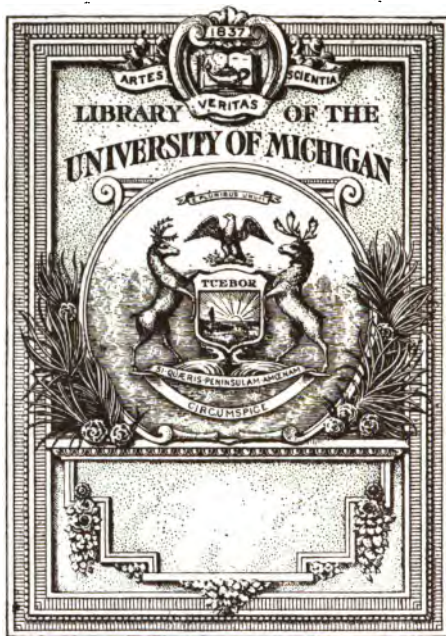
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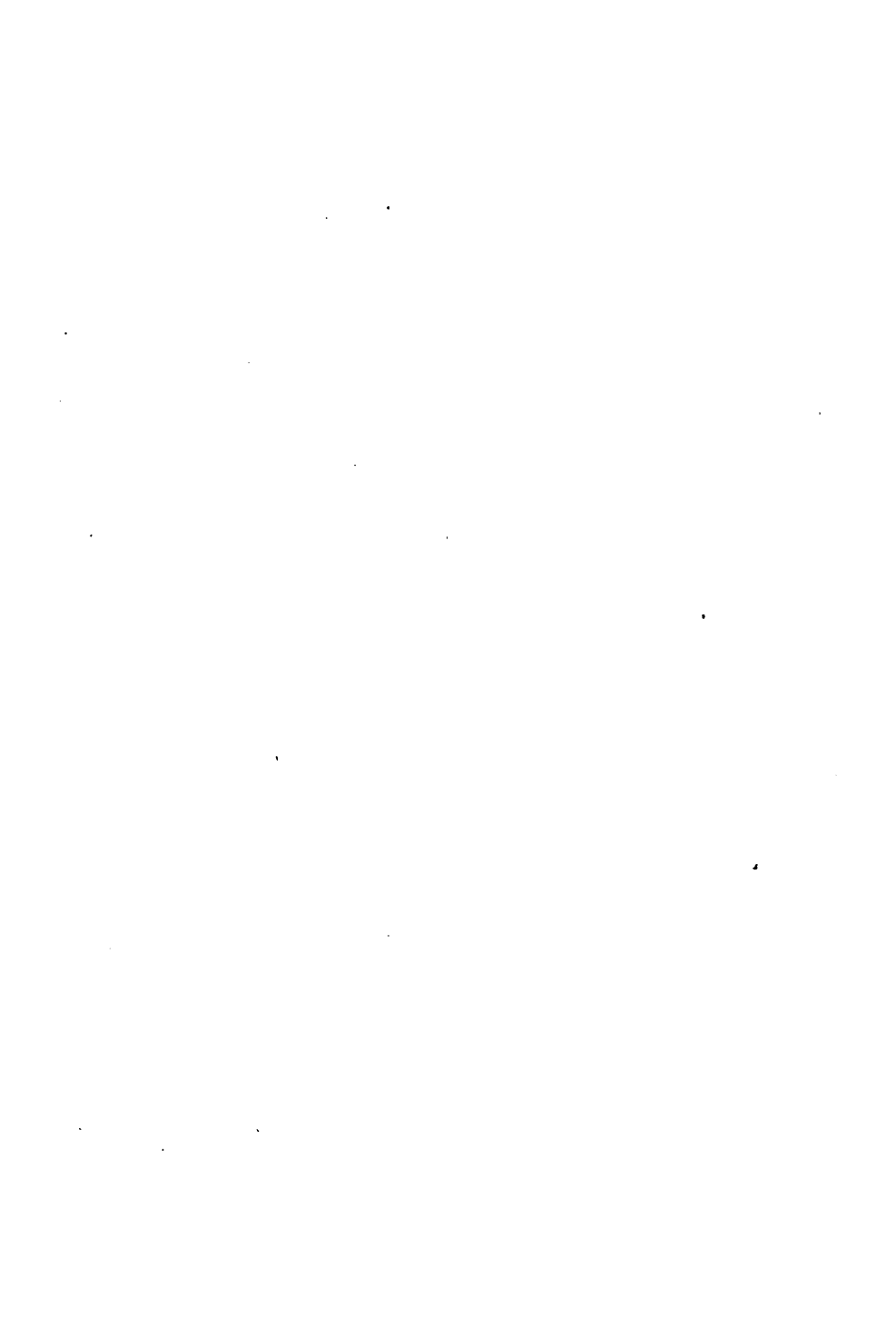
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TURKEY OAK

PLANTED AT JESMOND NEWCASTLE-UPON-TYNE. ON LORD ARMSTRONG'S WEDDING-DAY,
APRIL 21, 1835.

THE
USES AND BEAUTIES OF TREES.

REPRINTED FROM THE



"NEWCASTLE WEEKLY CHRONICLE,"

TO WHICH IS ADDED AN ESSAY FROM THE TRANSACTIONS OF
THE ENGLISH ARBORICULTURAL SOCIETY, ON

SUITABLE TREES FOR VARIOUS SOILS AND SITUATIONS.

BY

JOHN WILSON,

PARK KEEPER

LEAZES PARK, NEWCASTLE-UPON-TYNE.

"BEHOLD HOW FAIR, HOW FAR PROLONGED, IN ARCH AND AISLE, THE AVENUES OF THE VALLEYS; THE FRINGES OF THE HILLS! SO STATELY—SO ETERNAL; THE JOY OF MAN—THE COMFORT OF ALL LIVING CREATURES, THE GLORY OF THE EARTH."—*John Ruskin*.

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DEDICATION.

TO

JOSEPH COWEN, Esq.,

STELLA HALL, BLAYDON-ON-TYNE.

DEAR SIR,

The following Papers on the "USES AND BEAUTIES OF TREES," which I originally contributed to the *Newcastle Weekly Chronicle*, I now respectfully submit, in book form, to my patrons and subscribers.

The first writing of them was to me a labour of love, and a congenial employment during evening hours. The ultimate object I had in view was to encourage, as well as I could, a sympathetic taste for trees considered as individual specimens, and, at the same time, a healthy appreciation of them in picturesque combination. How far I may have succeeded

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in this attempt I cannot tell ; but one of the most pleasing circumstances connected with my little work is, that it has brought me into touch with many kind friends, in whom the love of beauty may be regarded as a virtue.

The importance of the subject, I believe, is gradually becoming more apparent, and I am not without hope that, through the influence exerted by Arborical and kindred Societies, good results will follow, and that tree planting and tree preservation, especially about our large towns, will be more scrupulously attended to in the future than in the past.

I should like particularly to mention here that I appreciate very much the kindness of Lord and Lady ARMSTRONG, who have enabled me to add so interesting a frontispiece to my book—a young oak which was planted in the private grounds, at Jesmond, on the day of their marriage, and which is now a finely-developed specimen tree. Lord ARMSTRONG is himself an extensive tree planter, and one who has, with rare judgment and exquisite pictorial taste, added much to the classic beauties of my native stream, the Coquet. I

sincerely trust that many will copy his Lordship's example. Trees are a heritage that future generations will be grateful for, just as we ourselves are grateful for what has been handed down to us by our wise and considerate forefathers.

In dedicating my little volume to you, I am well aware that you have quite other and higher claims to public gratitude than that of being a practical arboriculturist. I dedicate it, however, with perfect confidence in your kindness and sympathy, knowing, as I do, that you are ever ready to lend a friendly hand to such as have an honest desire to be useful, or are actuated by a pure motive for the public weal.

I am, Sir,

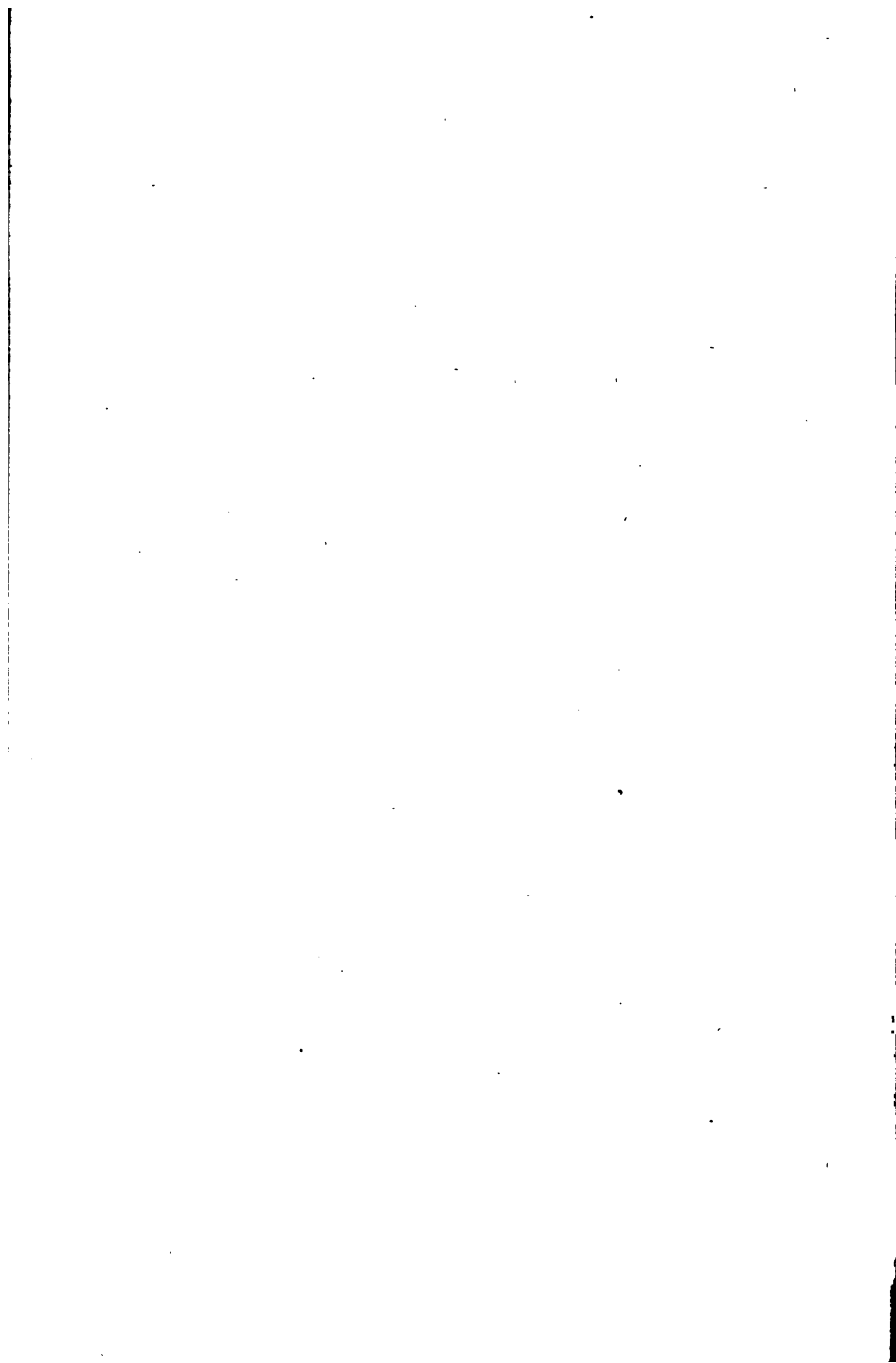
Yours most sincerely,

JOHN WILSON.

LEAZES PARK,

NEWCASTLE-UPON-TYNE,

October 31, 1889.



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THE USES AND BEAUTIES OF TREES.

THE SYCAMORE.

In speaking of forest trees, it is very commonly the practice to begin with the oak ; and more particularly so, if the speaker happens to be an Englishman. I shall not attempt to enquire into the motive of this peculiarity, though, I have no doubt, a very satisfactory reason could be got. In order to avoid any imputation that might arise from such an investigation, I shall commence with the sycamore, or great maple, botanically known as *Acer pseudo-platanus*. It is a tree universally admired for its massive foliage and impenetrable shade. COWPER speaks of it as

“The sycamore capricious in attire,
Now green, now tawny, and ere autumn yet
Have changed the woods, in scarlet honours bright.”

It is, undoubtedly, a grand and noble tree, though wanting the graceful elegance of many of its congeners. Noble and imposing specimens are frequently

to be met with about dwellings, or spots where dwellings have been. This would seem to favour the idea that the sycamore must, at some time, have been a special favourite. It was formerly supposed to be the same kind of tree as that which ZACCHÆUS climbed to see the Saviour when on His way to Jerusalem. More recent investigation, however, has gone to prove that it could not have been what we call a sycamore, but was indeed the *Ficus sycamorus*, or Egyptian fig tree, which is a common tree in Judea, and often grows to a great size. Still, it does not seem to me altogether unnatural to suppose the domestic planting of the sycamore was dictated by a kind of simple piety. I was first struck with this, perhaps fanciful idea while sauntering through the beautiful village of Otterburn. It was on a quiet, sunny morning, the air redolent of new hay, and the streams rippling and laughing in their stainless joy. Near the Presbyterian Meeting House, the blue smoke from a little cottage chimney was climbing the lofty sycamores, and losing itself among the cloud-like masses of dark green leaves. In spite of frigid philosophy, there appeared a kind of ancient sanctity lingering about them. It was, indeed, to me, at that time, a scene of simple loveliness and peace. I felt that a spiritual supervision could not be alien to the dwellings of the poor—

“The humble poor I was born among.”

WORDSWORTH, in one of his prose sketches of a mountain cottage, speaks of the cluster of embowering sycamores for summer shade. I have frequently seen such, in very out-of-the-way places, too; and it is a pleasing reminiscence to have reposed under their dark shade, "and viewed the plots of cottage ground."

The associations of the sycamore, however, are not by any means all of so peaceful and pious a character. In olden days, in Scotland, trees of this kind were frequently known as dool-trees or grief-trees. This peculiar epithet was specially applied to some characteristic specimen about the precincts of a feudal dwelling, and upon which the surly potentate gratified his proclivities for using the halter.

The last of those somewhat high-handed executions is said to have taken place at the old Castle of Cassillis, on the banks of the River Doon, about 200 years ago. It was, in fact, made a kind of dolorous colophon to the closing chapter of a very complicated and unfortunate love affair. Sir JOHN FAU, of Dunbar, was the luckless hero of it.

In favourable situations the sycamore grows rapidly, and to a great height. It stands the sea-air well, and is one of the best trees for town purposes. Old trees are remarkable, in common with the oriental and occidental planes, for the

excoriation of their bark, which produces a variety of hues, and serves to give the trunk and large boughs a rough and picturesque appearance. As a timber, it is close and compact, easily worked, and not liable to splinter. It takes a good polish, bears varnishing well, and is much used in certain parts of musical instruments. It is well adapted for cutting-boards, and is made into bowls, platters, large spoons, butter-prints, and such like dairy utensils. It is extensively used for machinery ; also for foundry patterns. When kept dry and free from insects, it lasts a considerable time, but is very impatient of moisture. As a fuel, it burns slowly, yet is said to throw out a very considerable amount of heat. The charcoal made from it is of a good quality. Authors differ as to whether or not the sycamore is to be considered a native tree. As it is a matter of very little consequence, we need not venture an opinion either way ; for, in the words of honest Sir ROGER DE COVERLEY, much might be said on both sides. According to LOUDON, the wood, when newly-cut, weighs 64 lbs. per cubic foot, and when dry, 48 lbs.



THE MAPLE.

The field or hedge maple (*Acer campestre*) is, without doubt, a native tree. It is of small growth, but quite interesting and picturesque in its way. GILPIN speaks of it as "an uncommon tree though a common bush." It bears clipping well, and, in old-fashioned gardens, was used for topiary work. In autumn, the tints of its foliage are sometimes remarkably lovely. The wood, though of small scantling, is compact, fine grained, and often beautifully marked. When in a green state it weighs about $61\frac{1}{2}$ lbs. to the cubic foot, and it loses about one-sixth in seasoning.

In old Roman days, the knotty excrescences frequently found on this maple were in much demand for fancy and costly cabinet work. In France, the curiously knotted roots are made into snuff-boxes, pipes, and other fancy articles. It also furnishes the very best quality of charcoal, fit for the making of gunpowder. The mistletoe is sometimes found growing upon this species, which is always a circumstance of interest.

Then we have the Norway maple (*Acer platanoides*), which is a tree of the first rank, and thrives well in our climate. Dr. JAMES BROWN, author of the "Forester," considers it, as a lawn tree, perhaps

unsurpassed by any other. It is not so dense in its foliage as the sycamore. The leaves are of a fine shining green, and closely resemble those of the occidental plane, and, in autumn, before they fall, they are of a rich warm yellow, which is very striking. The tree has a rough, brown bark, and the wood is soft and beautifully veined. The flowers are very fragrant, and of a yellowish green colour. In its native country it is considered one of the best trees for shelter.

The sugar maple (*Acer saccharinum*) is a well-known, notable, and interesting tree. It is a native of North America, and in some of the States grows very abundantly. About the year 1735 it was introduced into this country, where it became of considerable repute as a park tree. The golden tint of its autumn foliage renders it specially attractive, and a well-grown thriving specimen has a beautiful appearance. In the northern parts of New York and Pennsylvania, according to Dr. RUSH, there are ten millions of acres of this tree, in a proportion of thirty to the acre. It yields a considerable quantity of sugar, though not considered of the best quality.

The tree grows to an average height of fifty or sixty feet. When newly cut, the wood is white; but, after being worked and exposed for some time to the light, it acquires a rosy tint. Being sufficiently

heavy and strong, it is used for a variety of domestic purposes. It is fine, close grained, and takes a silky polish, but is not durable. The bark yields a blue dye, and an ingredient in the making of ink. Most of the potass imported from Boston and New York is the product of this tree.

According to botanical authority, there are upwards of thirty kinds of maple, for the most part beautiful trees of considerable size. Some of the varieties, especially the Japanese sorts, are of exquisite beauty in the colour and form of their foliage.

THE BEECH.

The common beech (*Fagus sylvatica*) is a tree of noble dimensions and characteristic growth. When old and well developed (if it has been fully exposed to the light), it has a polished pillar-like stem, which supports a thick umbrageous canopy of dark green foliage. It makes a good park tree, notwithstanding that Mr. GILPIN speaks somewhat disparagingly of its picturesque qualities. The wreathing of its "old fantastic roots," however, as GREY has it, and its peculiar fluted stem, are undoubtedly qualities of a picturesque kind, much appreciated by painters. Sir THOMAS DICK LAUDER considered a noble beech one of the most magnificent objects of creation. The branches are somewhat pendent, and the leaves thin

in texture, and of a deep shining green, changing in autumn to a rich orange brown. The leaves are very elastic and durable, and are frequently used on the Continent, and even in some parts of England, as a material for beds. EVELYN, speaking of their use in Switzerland, says : "I have sometimes lain on them to my great refreshment." One objection I have, myself, heard to their use is the rustling noise they make. They are, however, said to be very healthy, and superior to beds of chaff.

The timber of the beech is a good deal used in the making of furniture, such as chairs, tables, and the like. It is also used for carriage panels, and in certain parts of ship-work. Stone-cutters and carpenters prize it for mallets and various kinds of tools and fittings. It is said to stand submersion well, and is used for sills in canal locks, keels of vessels, and for planking in those parts constantly under water. According to LONDON, the durability of the wood is increased by steeping it for some time in water. It weighs about 66 lbs. per cubic foot when green, and about 50 lbs. when seasoned.

Some 90 or 100 years ago, the beech was extensively planted in Northumberland. The timber was much used about that time for colliery waggon-ways, and there was likely to be an increasing demand. The introduction of iron rails, however, did away with its use. It is said to be one of the very worst trees to

plant in a hedge-row. Its dense shade and drip is very hurtful to most kinds of herbage; indeed, the only plants that seem to thrive under its shade are the wood mercury and the wild hyacinth. A kind of grass *Brachypodium sylvaticum* I have observed to flourish in beech woods, where the soil is somewhat thin, and the surface undulating, and more particularly if it be traversed by a stream. The beech bears clipping well, and makes an excellent hedge plant for garden or nursery purposes. In that respect it is superior to the hornbeam, and it retains the withered leaves during the winter, thus affording additional shelter. There are several sorts of beech more or less interesting, but not demanding our special notice at present, except, perhaps, the purple beech, on account of its rich, striking foliage and pendent habit.

The common beech has been called the Hercules and Adonis of our sylvæ, and some of our readers will perhaps remember CAMPBELL's little poem, beginning—

“Oh ! leave this barren spot to me—
Spare, woodman, spare the beechen tree.”



THE ASH.

There is no kind of wood of more general usefulness than the ash. It is remarkably tough, elastic, and durable ; well adapted for all kinds of long handles, as those of hoes, rakes, forks, brooms, mattocks, axes, spades, shovels, hammers, and mallets. It is extensively used in the making of all kinds of waggons, carts, carriages, various kinds of wheels, rounds for ladders, pails, tubs, churns, hoops, saddletrees, blocks, etc. It is also much used in making furniture of useful, ornamental, and substantial quality. It is indispensable to the gunner, the oarsman, and the acrobat. It makes excellent butts for fishing-rods, and is the basis of the tennis-bat, besides being noted for many distinguishing attributes even in the humble capacity of the pilgrim's staff. Who has not heard of "Grandfather's Staff?"

"'Twas as bonny an ash staff as ever was seen
In the hands of a pilgrim, or paths of a wood ;
'Twas as tough as the bow of Ulysses, I ween ;
Its polish was high, and its fibre was good.
'Twas the grandfather's stick, and his stick alone—
Of its forty years' service how proudly he'd tell ;
'Twas all very just—he might call it his own,
But everyone else seemed to claim it as well."

The ash has been called the Venus of the forest. In point of magnitude, it is a tree of the first rank.

It delights to grow in glens and denes where there is a stream. Considered simply, as a picturesque object, it is not held in any great repute. In combination with other trees, it no doubt has often a fine effect. GILPIN speaks very favourably of some of its qualities. "Nothing," says he, "can have a better effect than an ash hanging from the corner of a wood, and bringing off the heaviness of the other foliage with its lose pendent branches." The ash comes late into leaf, and, on that account, should be sparingly planted about a gentleman's residence, to avoid the risk of giving it a cold, late appearance, at a season of the year when all nature should smile.

In many districts it is very common as a hedgerow tree, but has been objected to on account of its drip, which has been said to be very injurious to herbage. I have not, myself, observed it worse than other trees in that respect. In exposed places, a good deal more is gained by shelter from hedgerow trees than is lost by either drip or shade. When green, ash-wood weighs about 64 lbs. 9 oz. per cubic foot, and, when dry and seasoned, about 49 lbs. 8 oz. or so. Its camleted roots are used for making fancywork. As a fuel, it burns freely in a green state, as well as when dry, giving out much heat, and little smoke. In the words of EVELYN, "it is the sweetest of our forest fuelling, and the fittest for

ladies' chambers." The same author says the seeds or "keys," as they are often called, "if pickled when green and tender, are a delicate salading."

There are upwards of thirty species of the ash, the greater part of which are natives of America. Of the common native species (*Fraxinus excelsior*) there are several varieties, the principal being the weeping or pendulous form, originally found in a field at Gamblingay, Cambridgeshire, and since perpetuated by grafting on the normal stock. How some trees come to acquire this hereditary downward tendency is, I believe, a mystery. They retain all the admirable characteristics of their race, except that of being upright.

THE ELM.

The English elm (*Ulmus campestris*), of which I shall first speak, may be taken as a typical form of a somewhat numerous species. Among botanists and dendrologists, who have made this genus a special study, a considerable amount of doubt and uncertainty has always existed as to what should be considered species, and what varieties. Instead of entering upon a host of puzzling details, I shall adopt the opinion of Mr. Loudon, and consider all the so-called British elms referable to two species, viz., *Ulmus campestris* and *Ulmus montana*.

For magnitude, majesty, and grandeur of outline, the English elm has few rivals. It is one of the most imposing and picturesque of our forest trees, being considered only inferior to the oak itself. "No tree," says GILPIN, "is better adapted to receive grand masses of light. In that respect it is superior not only to the oak and ash, but, perhaps, to every other tree." The spray of this elm is also comparatively slender, and the foliage, though thick and massive, never appears heavy, but hangs in a free and easy manner, pleasing to the eye. The young leaves are of a pale, cheerful green; but, as the season advances, they acquire a deeper and darker tint, which, in its turn, gradually changes to a fine, clear autumn yellow, "which mixes kindly," says GILPIN, "with the orange of the beech, the ochre of the oak, and many other fading hues of the wood."

It is in the Southern and Midland districts of England that this, "the rugged elm" of the poet, is to be found in its greatest perfection. Some of the finest specimens are in the vicinity of ancient family mansions, in old avenues, or about the precincts of time-honoured village churches. In such situations they never fail to display many characteristic qualities which catch the pensive mind, awakening recollections of days long gone by, and of places where—

"Quite round the pile a row of rev'rend elms,
Coeval near with that all-ragged show,

Long lashed by the rude winds, some rift half-down
Their branchless trunks, others so thin atop
That scarce two crows could lodge in the same tree.
Strange things, the neighbours say, have happened here."

The varieties and sub-varieties of this elm are, most of them, distinguished by their comparatively smaller leaf, and an aptitude to throw up suckers from the roots. The species known as *Ulmus montana*, and its varieties, of which I shall speak presently, throw up no suckers. *Ulmus suberosa*, or cork-barked elm, is one of the most distinct of the small-leaved type. Whether it be considered as a species, or only a protean form of *Ulmus campestris*, is of little consequence. Instead of the compact and upright form which characterises the common English elm, this has a tendency to spread into a few large, diverging limbs, more after the manner of *montana*. Its foliage, too, is much larger than that of *campestris*, and is somewhat later in developing. The bark has also a more suberous quality, and the wood is constantly spongy and soft, and not compact and durable like that of *campestris*.

The wood of the English elm is hard, tough, and porous, of a brownish colour, and a good deal twisted in the grain. It is very difficult to work when seasoned, and will hardly split. It is used by cabinet-makers, wheel-wrights, turners, and carpenters, for a great many purposes. Whether what we call the

English elm is originally a native is, I believe, an open question.

Ulmus montana, the mountain wych, or Scotch elm, is, without doubt, a true native. As a timber, it is rather more porous than the English elm. Being comparatively straight in the grain, as well as very tough and flexible when steamed, it is much used in boat-building, as well as for the ordinary purposes of the common elm. It is eminently a picturesque tree, and often forms a prominent feature in the secluded and romantic glens of the North. Sir THOMAS DICK LAUDER considered it one of the most beautiful trees in the Sylva. Its trunk is bold and striking, and the branches free and graceful in their line of growth. The foliage is large and finely massed, without being heavy. Noble specimens of this tree are frequently to be met with along our rich river valleys, and in the "deep dowie dales" of Scotland and the North of England. I have often felt a strange and somewhat melancholy interest when looking at some solitary tree of this kind growing in a quiet-green holme, or by the side of some gossiping, rock-skirted burn, far away in a lonely mountain glen; no human eye to see it, almost; no sympathy to joy in the still spirit of its quiet beauty. Yet, year by year, prompt to the genial invitation of the spring, it unfolds its treasure of light green leaves, and mirrors them afresh in the

crystal deeps of the pool. As a park tree, I am rather partial to the wych elm. It is a good grower, and will stand a considerable amount of hardship.

THE OAK.

For grandeur of form, for strength, durability, and general excellence of timber, the oak, undoubtedly, stands at the head of the first rank of our forest trees. "It is a happiness to the lover of the picturesque," says Mr. GILPIN, "that this noble plant is as useful as it is beautiful." It has been truly designated the monarch of the wood, and is, of all the sylvan family, the pride of the patriotic Englishman—

"Let India boast her plants, nor envy we
The weeping amber, and the balmy tree ;
While, by our oak, the precious loads are borne,
And realms commanded which those trees adorn."

It must now be confessed, however, that this ostentatious language is considerably modified by the use of iron in shipbuilding ; and we have yet to learn how that material will comport itself against the more modern methods of destruction, and how it will aid the inspiring witchery of sentiment in national song.

Oaks—venerable fathers of the forest—were held sacred by the Greeks and Romans, as well as by the

Gauls and Britons. The Druids, also, held their religious ceremonies under their spreading boughs, and the tree itself was regarded by them with particular veneration. When mistletoe was found growing upon it, as is sometimes the case, there was great rejoicing. It was approached with reverence, we are told, and cut off with a golden hook. The sacred bush was not permitted to fall on the ground, but was received with consummate care upon a white sheet. Having due respect, always, for the spirit of ancient religious ceremonies, I cannot but confess some misgivings about the golden hook, and would hesitate to stand surety for the meekness of any lively-tempered individual obliged to whittle through a tough stalk of mistletoe with an instrument so ductile. Be the truth of it as it may, we can, with innocence, regard it as one of those old visionary records that please the imagination, and recall the words of KEATS, which tell us—

“There is a pleasure on the heath,
Where Druids old have been,
Where mantles grey have rustled by,
And swept the nettles green.
There is a joy in every spot
Made known in days of old,
New to the feet, although each tale
A hundred times be told.”

The oak family is a large one, and the different members of it are possessed of a considerable diver-

sity of character. There are, it is said, 150 botanical species, two only of which are natives of Britain, viz., *Quercus (robur) pedunculata*, and *Quercus (robur) sessiliflora*. The species known as *Q. pedunculata* is held to be the most "unwedgable and gnarled." The growth of it is spreading, and the numerous branches thick and crooked. The leaves are smooth, oblong, dilated upwards, with very short stalks and blunt lobes, with rather sharp sinuses. The acorns are oblong in shape, and grow upon elongated stalks. When taken in its typical form, these are a few of its distinguishing characteristics assigned to this species by botanists. It is, however, apt to vary and become considerably altered by soil, situation, and other causes. This circumstance has led some to consider such modified varieties as hybrids; but the fact of their producing fertile seeds rather militates against such a supposition, and tends to favour the belief of their common origin.

Q. Sessiliflora, though generally accepted as a British species, is supposed by some to have been introduced into this country, at an early age, from the Continent, where it particularly abounds. In this species, the foot-stalk of the leaf is somewhat longer than that of the last; while the acorn-stalks are shorter, and bear the fruit, in clusters, of two or three together, close to the twig of the branch. The

branching itself is freer and straighter in the growth than in *Q. pedunculata*, and the leaf-buds are larger. The bark, too, is somewhat lighter coloured, and the leaves usually of a much greater size, which, owing to their rather lengthy petioles, hang more loosely, and present a less tufted appearance. Apart from these distinctions, it has been said that "there is a kind of indescribable something about the trees by which a practised eye can always distinguish each, without examining either the acorn or the leaf-stalk."

With respect to the timber qualities of the two so-called species, there seems to be a diversity of opinion. The sessile fruited sort has the character of being inferior; but I am not aware that this assertion has been proved to the general satisfaction of the trade. Mr. LASLETT, Inspector of Timber to the Admiralty, says that "during a long experience in working them he has not been able to distinguish any important difference." Generally speaking, the wood is of great strength and durability, and, owing to the excellent combination of these and other qualities, it has been largely used in shipbuilding. Although other kinds of wood are now much used for the same purpose, yet, the true British Tar still maintains that his ship is the real "heart of oak." Indeed, so good are its characteristic properties, that it is adopted as the standard of quality and fitness

for architectural requirements ; and, in architecture, it is extensively used. When so far tending to decay as to become a kind of deep red colour, it is much prized by cabinet makers ; it is then said to be in a stage of "*foxiness*." Oak timber has one particular drawback. It contains a strong pyroligneous acid, which has a rapid corrosive action upon iron, quickly destroying nails, bolts, and other fastenings made of that metal.

Oak seems to have been very plentiful in Britain at one time. Gigantic specimens have frequently been dug up from alluvial deposits on the margins of our rivers, and in various boggy places, where an oak of any kind is now scarcely to be seen. About fifty or sixty years ago, the trunk of a magnificent oak was dug from a peat moss, on the Linden estate. It was covered by the peat to the depth of about three feet, and evidently had remained in its prostrate position for a great number of years. Notwithstanding that the sapwood had entirely perished, the part recovered contained 345 feet of perfectly sound timber. When cut up, it was found to be of a rich, brownish colour towards the centre ; while the outside was perfectly black. Some beautiful pieces of furniture were made from it.

No object of the forest affects the imagination more than an old and venerable oak. The long record of years marked so visibly upon it, the inevitable

triumph of time over its existence at last, are very striking to a meditative mind. SPENCER gives a good, though not a pleasing, picture of an old oak seen, as it were, "tottering to decay."

"A huge oak, dry and dead,
Still clad with relics of its trophies old,
Lifting to heaven its aged, hoary head,
Whose foot on earth has got but slender hold,
And half-disbowelled stands above the ground,
And trunk all rotten and unsound."

Some celebrated old oaks yet remain amongst us. The most noted is the Cowthorpe oak, situated three miles from Wetherby, in Yorkshire. It is said to be one of the greatest vegetable wonders in England, and is supposed to be upwards of 1,600 years old. It measures about 54 feet in girth at the ground, and the trunk, at the height of six feet, is 34 feet in circumference. This measurement is preserved to almost the top of the trunk, which is 36 feet. One of the lower branches projects about 50 feet. The measurement given by Sir THOMAS DICK LAUDER, in 1834, was 78 feet in girth at the ground. The discrepancy of the two measurements is accounted for by the base having been partly covered up with soil. The Yardley oak is 22 feet 6 inches in girth, which is little more than a third of the Cowthorpe oak. It is yet a sublime tree, and is intimately connected with the memory of the poet COWPER, who wrote part of a poem about it, and tells us, in one of his

letters to his friend ROSE, that it had been known by the name of Judith many ages, and is said to have been an oak at the time of the Conquest. Some one has suggested that the tree may have been planted by the Countess JUDITH, a niece of the Conqueror, who was married to Earl WALTHAOF, and received the Counties of Huntingdon and Northampton as her dower. Two very notable oak trees are growing, or lately were growing, near Jedburgh: one, which is known as the "king of the woods," has a trunk of 43 feet in height, and a girth of more than 16 feet. Near it is the Capon tree, having a very wide-spreading head and a short stem, with a circumference at the base of more than 24 feet. It is a peculiar tree, and served as a trysting place for the Border Clans in olden times. The two are supposed to be the remains of the ancient Forest of Jed.

Many sublime and apt allusions are made to the oak, both in ancient and modern literature. The oak is said to be more frequently struck by lightning than almost any other tree, but we are not aware that there exists sufficient evidence to establish it as a fact. SHAKESPEARE evidently alludes to the circumstance when he says—

"Thought-executing fires,
Vaunt couriers to *oak-cleaving* thunderbolts."

As a hedge-row tree, it is considered as one of the very best. Its drip and shade are less injurious to

undergrowth than almost any other, and it becomes very ornamental in such a situation. In the words of the poet COWPER—

“The oak

Thrives by the rude concussion of the storm.

It seems indignant ; and to feel

The impression of the blast with proud disdain ;

But, deeply-earthed, the unconscious monarch owes

His firm stability to what he scorns ;

More fix'd below, the more disturbed above.”

The bark of the oak, as is well known, is extensively used for the purpose of tanning ; and to the artist we recommend a “bark wood,” in some wild ravine, as a subject full of picturesque and romantic interest.

One of the privileges claimed for our ancient, painted forefathers, is that of roaming about in huge forests, and feeding on acorns. We have emulated them so far in that respect as to have tried the experiment in our boyhood days, and found such fare anything put palatable. Some of the foreign oaks, however, yield acorns that are eatable. In the early days of Greece and Italy, we are told, acorns had an important place among the more savoury viands of the inhabitants. In GILPIN's day numbers of swine used to be annually turned into the New Forest to feed upon the acorns, and were taught to come together at the sounding of a horn.

Having already mentioned Mr. LASLETT respecting the relative difference of timber qualities in the two so-called species of English oak trees, it is but fair to state that that opinion is supported by eminent botanical authority. Professor BABINGTON says: "I have failed in learning how to distinguish them." Microscopic inquirers, again, who deal with minute ligneous sections, say there is a difference.

THE TURKEY OAK AND CORK TREE.

As a valuable addition to our list of forest trees, the Turkey, mossy-cupped, or bitter oak (*Quercus cerris*), is deserving of special mention. In general appearance it differs very considerably from our native species. It is of a more upright growth, and is much less prone to throw out large limbs. The branches, in addition to their more upright manner of growth, have a remarkable gibbosity at their junction with the stem, besides being more subordinate to it. The bark of the young plant is comparatively smooth, and of a darkish grey colour, and it assumes a rugged, rather corky, texture as the tree grows old. The leaves are oblong, lobed, and sinuated, and of a beautiful shining green on the upper surface, and their under surface glaucous, which causes the mass of foliage to have a fine effect when stirred by the wind. The acorns are sessile, or

on very short stalks, and have rough, mossy-looking cups. The tree grows to a great size, has a handsome, well-balanced form, and is, therefore, very ornamental, and makes an excellent park tree. Chance specimens of this kind are now and then to be met with in very untoward circumstances about many of our towns and cities, and I have no doubt it is a good sort to plant liberally about the suburbs.

For general purposes, the timber is said to be little, if at all, inferior to that of the English oak. It is tolerably close in the grain, of a beautiful texture, and takes a fine polish. It has been introduced about 150 years, and is now a good deal planted for picturesque purposes. As with oaks in general, there are a great many varieties of this species which serve only to interest the curious. The forms known as the Fulham and Lucumbe oaks are the result of a cross between the Turkey oak and the cork oak, *Q. suber*. The mossy-cupped species is very plentiful in certain parts of Asia Minor, and is the kind which is principally used in the imperial dock-yards of Constantinople. The Turk, as we are told, is very careful to select for his own immediate use such trees as are clean, straight-grained, and easiest to work; while, at the same time, he as carefully avoids those that have stubborn nodosities and cantankerous twists in their constitutions; in short, those in any way likely to give

him trouble. JOHN BULL likes those qualities sometimes, and prides himself in them, and is gratified to think they are possessed in a superlative degree by his favourite tree.

I may here mention that, in a general way, the oak timber of commerce very often derives its name merely from the port it comes from, and that, strictly speaking, it may consist of several species. The skilful timber-merchant, however, will always be able to distinguish the qualities of the timber without troubling his head in any way about the botanical niceties of the plant. In referring again to *Q. suber*, we may remark, as a circumstance of special interest, that it is from this tree that cork is chiefly got, and hence the common name of cork tree. It is an ever-green species, with an ovate-oblong coriaceous leaf, which is either entire or sharply serrated at the edge, and downy on the under surface, about two inches long, and one-and-a-quarter broad. It was introduced in 1699 into this country, where it is grown, I dare say, principally as a curiosity. It is a bushy, rather than a lofty tree, and seldom exceeds more than forty feet in height, even where it is a native of the soil. The wood is hard, heavy and compact, but is not considered so durable as that of the common oak. It is principally valuable on account of the bark, which is of a very thick and rugged texture. The dry outer portion only being useful to commerce,

it is stripped from the standing tree without injuring its vitality, or going to the quick as it might be expressed. By a particular method, it is taken off in large flakes, scraped, cut into pieces, charred slightly to close the pores and kill insects, and then flattened by placing weights upon it. For special purposes, it is sometimes boiled, a process which is said to very much improve the quality of the material. The cork tree is abundant in Spain, Portugal, Italy, and South of France. The substance known as Spanish black is got from cork, which is burned in a particular way, and is, therefore, indirectly a product of this tree.

Quercus infectoria is an interesting oak, and is noted as being that from which gall nuts are principally procured. The gall, as everybody knows, is caused by the puncture of an insect, and is a morbid excrescence formed on the shoot, of a marble-like shape. In the centre of it is secreted the little grub, which, by-and-by, digs its way out to the light of day, and enters upon another condition of being ; sports awhile in the summer sunshine, then, with the same mysterious round of instinct, seeks in its turn to deposit the germ of its future progeny in the same kind of slender oaken twig. But enough of this. The gall oak is more a deciduous *shrub* than a *tree*, for it stands only from four to six feet high. Its leaves are small, smooth, bright, and green, and

rather deeply serrated. It is a native of Greece, Turkey, and North Africa.

The holme oak (*Q. ilex*) is a useful evergreen species. It has been cultivated in British gardens for a long period of years. It attains a height varying from 15 to 30 feet, and bears a dense mass of sombre green leaves, which are hoary beneath. The general character is more, perhaps, that of a large bush than a tree. It thrives better than most evergreens in the neighbourhood of large towns, and is a most excellent sea-side plant. The late A. J. B. CRESSWELL, Esq., planted a good many of them when forming his plantations and ornamental grounds at Cresswell. They grow and thrive within a very short distance of the sea beach. There are several varieties of the species, and, in this sort, the individual leaves vary a good deal, sometimes even on the same tree. It is very difficult to plant successfully, as it is deep-rooted, with but few small fibres. A good sandy loam suits it best—a good sandy loam, with a dry bottom.

Several of the American oaks are very beautiful and ornamental, besides furnishing valuable timber. That known as the white oak, *Q. alba*, is strong and elastic. The bark is whitish, but the wood itself is rather red, and not quite so compact and heavy as the British oak. The red oak (*Q. rubra*) is another valuable species, largely imported as a timber, and

much used by cabinet makers. It is very porous, and, although of slow growth, is not considered either strong or durable, and is, therefore, not much used for building purposes. The *Q. virens*, or live oak, introduced in 1739, is another well-known species in America, and is much prized for its timber qualities. In the Southern States it reaches a height of from thirty to forty feet, and is evergreen, with leathery, pointed, oblong leaves, rather downy beneath. The wood is heavy, strong, and stubborn to work, on account of its waved and twisted grain. It comes in comparatively small logs, but can be used for a variety of purposes in shipwork. Mr. COBBETT, who was an enthusiast in arboriculture—just as he was in anything else he took in hand—extols, with his wonted Saxon vigour and heartiness, the merits of this tree, pointing out especially that it is used extensively and advantageously for what shipbuilders call “knee timbers.” “A plantation of live oaks,” says Mr. COBBETT, “would be a most beautiful thing, and valuable beyond all calculation.” “To cause an extensive plantation of which, to be made in England, would merit the title of duke, ten thousand times more than ten thousand battles of Waterloo.” I, by no means, go the length Mr. COBBETT does, in my admiration of this tree. Upon one occasion, which shall be mentioned by-and-by, his sylvan goddess wheedled him astray.

Some of the American oaks are remarkable for the beauty of their autumn foliage. The tints of the scarlet oak, (*Q. coccinia*) for instance, are rich, varied, and lovely, almost beyond conception, sometimes. This is a sort that promises to grow well as a town tree. As with people, so with trees. Let us always be courteous, kind, and considerate in entertaining strangers ; and, I would add that, all who wish to stand well with posterity, and have a little nook of ground at their disposal, should not neglect to plant trees of various sorts, but more particularly our own tree, the British oak—

“Hugged in the clinging billow’s clasp,
From sea-weed fringe to mountain heather,
The British oak, with rooted grasp,
Her slender handful holds together.”

THE SPANISH CHESTNUT.

As a picturesque tree, the Spanish chestnut (*Castanea vesca*) is a formidable rival even to the oak itself. Sir THOMAS DICK LAUDER considered it, in form and foliage, “not a whit behind that recognised monarch of the woods.” It grows to a great size, and endures for ages. In old trees, the trunk and large boughs are massive and rugged-looking, and the branches bold and easy, with fine masses of foliage. The fruit or nut is much esteemed,

especially by omnivorous youngsters ; and, when eaten with salt, is said to be very nutritious. EVELYN calls it "a lusty and masculine food for rustics at all times, and of better nourishment for husbandmen than cole (cabbage) and rusty bacon, yea, and beans to boot."

There are many gigantic specimens to be met with in England and Scotland. The great chestnut at Tortworth, in Gloucestershire, is said to have measured fifty-one feet in circumference at six feet from the ground. The wood has the remarkable property of being more durable in its young state than when it is old. When used for posts it has been found to far outlast the oak. It is still used, sometimes, in making casks, a purpose for which it is tolerably well adapted. In a green state, the timber weighs about 68 lbs. 9 ozs. per cubic foot ; and, when well-seasoned, about 41 lbs. 2 ozs.

It furnishes a strong and good charcoal, though somewhat inferior to that of the oak.

It was with the chestnut tree that SALVATOR ROSA delighted to adorn his bold and rugged landscapes. A small engraving of one of those paintings is now before me, in which the chestnut is very characteristic, and appears to great advantage. On the right side, as you look at the picture, there rises from a deeply-shaded pool, with a few reeds growing in it,

a gloomy, jagged precipice, scantily scattered over with small trees and bushes. On the left, and close upon the low foreground, stands a knot of those old chestnuts—the largest, a shattered trunk—dark and sharp against the evening light, which is streaming down the wild valley, and shedding over the savage features of the scene a smile of peace and quiet.

There has been a good deal of learned and ingenious discussion as to whether or not the chestnut is, originally, a native of British soil. But the evidence is so long, so contradictory, so mixed with the blinding dust of antiquity, that I shall not attempt to sum it up. An English pedigree is always considered passable when it can be traced to the period of WILLIAM THE CONQUEROR. This much, I think, can be safely claimed for the chestnut, and, as those who are proud of their pedigree sometimes say of it, we may say of the chestnut: "Perhaps the Conqueror found it here."



THE LIME.

The lime or linden, (*Tilia Europæa*), is a tree possessing many useful, attractive, and even valuable qualities. It has always been a favourite for avenues, both in France and England. Although not considered eligible to stand in the foremost rank of picturesque trees, it is, nevertheless, particularly striking, both in the symmetry of its growth, and in the beautiful uniformity and regularity of its outline. Qualities of this kind will always ensure its favourable reception as a park tree. The leaves are of a fine, delicate green, and the delicious sweetness of the flowers is a great attraction to bees and other insects. No tree throws a more agreeable shade than the linden. The elegant LANDOR speaks in raptures about it: "Who in the world," he exclaims, "could ever cut down a linden, or dare, in his senses, to break a twig from off one? The flowers of the linden should be the only incense offered up in the churches of God. Happy the man whose aspirations are pure enough to mingle with it!"

The lime is considered a good tree for planting in towns, as it has the reputation of standing the smoke well. It is not adapted to bleak, cold situations, but is eminently a tree of the plains, and thrives best in rich loam, in a somewhat moist and sheltered place. Under such circumstances it will

attain to a considerable size. There are three or four different species, and several varieties, most of them attractive trees. Foremost is the North American species, *Tilia Americana alba pendula*. The wood of the lime is close-grained, soft, and of a uniform white ; easily worked, and stands the tool well. It is much used by carvers, and is frequently called the carver's tree. The celebrated GIBBONS used this wood in some of his finest work. "He was the first artist," says WALPOLE, "who gave to wood the loose and airy lightness of flowers."

The wood of the lime is little subject to the attack of insects, is very light, and a good deal used by musical instrument makers, and also by carriage makers for panels. It makes first-rate cutting boards for shoemakers and glovers. Various kinds of toys, and light, fancy articles are made from it. The wood weighs 55 lbs. per cubic foot when green, and 37 lbs. dry. It yields a good charcoal, almost as good as that of the willow or alder, and is used as an ingredient in gunpowder.

A writer in the *Quarterly Review*, of 1876, says : "The smoker knows no choicer rendezvous than the lime walk for the enjoyment of the quiet 'weed.'"

Bass mats are manufactured from a product of the lime tree. The trunk, being tall and free from knots, enables the bark to be stripped off in long

pieces. It is then macerated in water, so as to cause the layers to part easily. The bass or fibre is then divided into narrow strips, which are worked into the required size, to be used for various kinds of packages, baskets, &c. I have seen bass mats put up in old farm cottages instead of a ceiling. They were supported by what was called "bendel," or "bennel" sticks, which were long, thin poles, stretched from point to point, to prevent the basses from "sagging" too much. Like the window and the fire-place, they were the tenant's own property.

THE ROBINIA.

The robinia, also called false acacia, and sometimes the locust-tree, claims the honour of being one of the first trees introduced into this country from North America, and has been cultivated in England, as an ornamental tree, upwards of 250 years. About fifty or sixty years ago it acquired a considerable amount of popularity through the influence of WILLIAM COBBETT. While in America, from 1817 to 1819, Mr. COBBETT became convinced that "nothing in the timber way could be so great a benefit as the general cultivation of this tree." He, accordingly, on his return to England, became nurseryman and disseminator of the locust-tree. As this title was new, or, at all events, little known at

the time, many were led to consider it a new kind of tree, the extensive planting of which would ultimately prove a profitable investment. Such was the effect of puffing on the one hand, and of credulity on the other, that, as LOUDON tells us, whilst quantities of *Robinia pseudo-acacia* stood unasked for in the nurseries, the locust, which people imagined was only to be had genuine from Mr. COBBETT, could not be grown by him in sufficient quantities to supply the demand. As was to be expected, the locust-planting mania subsided in a few years, and its admirers became convinced that the quality of its timber had been over-rated. The wood, however, is hard and compact, takes a good polish, and is of somewhat greenish-yellow colour, marked with brown veins. Having an excellent character for durability, the wood is used, in America, for posts, rails, &c., and will last for many years.

It is a rough-barked tree, with twisted, straggling branches, and light, elegant, pinnated foliage. It is also adorned with racemes of sweetly perfumed flowers. Being very liable to be shattered by the wind, old trees are, in consequence, frequently of a fine, picturesque appearance. Mr. GILPIN remarks, however, that "the acacia is not one of those grand objects, like the oak, whose dignity is often increased by ruin ; it depends on beauty, rather than on grandeur, which is a quality more liable to injury."

Considered in a picturesque light, there is a kind of noble pathos in the expressions of the pencil when it depicts the ruins of an old oak, an old monastery, or an old tower, gradually succumbing to the destroying hand of Time ; but not so when it represents a tumble-down, modern structure, the aspect of which is merely an evidence of slovenly neglect. An old oak is considered sublimely picturesque, principally for the indication it gives of brave strength and heroic endurance, a quality shared by other trees only as they approximate to this standard. On the contrary, an old robinia is to be characterised as *beautifully* picturesque, on account of its frequently shattered boughs being often happily adorned by long, graceful tufts of young growth. These lend a softness and a delicacy to the sterner features of the tree itself.

One of the most elaborate articles in COBBETT's book, "The Woodlands," is that upon the locust-tree. He calls it the "tree of trees," and says, with his unique and characteristic egotism : "I believe I know as much of this subject, and perhaps more, than any man in the world." COBBETT was not one to keep his light under a bushel, but flashed it into every place where he thought there was social or political darkness. "We never heard of a man in England," says he, "that ever planted this tree until we took the matter in hand, except as a mere

ornament." After farther extolling its qualities, he declares : "The durability of the wood is such that no man in America can pretend to say that he ever saw a bit of it in a decayed state. It is absolutely indestructible by the powers of earth, air, and water." "It is to this timber," he adds, "that the American ships owe a great part of their superiority to ours." The following, from the same author, I would more seriously commend to all lovers of the picturesque : "Indeed, it is a sorrowful instance of human frailty, that men are deterred from planting, because they think they, themselves, shall not see them come to perfection."

THE PLANE.

The Oriental plane (*Platanus orientalis*), when full grown, is a tree of very beautiful and imposing aspect. It has a massive and rugged-looking trunk, with a wide-spreading head, which, when in perfect foliage, affords a dense shade. The leaves are large, cut into deepish segments, and of a rather light, shining green. The under surface is paler in colour, and slightly hairy. It is a native of Persia, Greece, and other parts of the Levant, and was introduced into this country upwards of 300 years ago, being mentioned by TURNER in his "Names of Herbs," 1541. It is a tree well adapted for pleasure grounds,

as it has a mild and cheerful expression. LOUDON commends it for this quality, and for a majesty and gracefulness of form eminently fitting it for domestic scenery.

This particular kind of plane is mentioned in the earliest records of Greece, and we are told that when XERXES invaded that country, he came upon one of those magnificent trees, and was so enamoured of its colossal form and inviting shade, that he halted his whole army, and stayed under its spreading boughs for an entire day, during which time he had it encircled with a hoop of gold, and decked out with other fantastic ornaments. We are further informed that he styled it "his mistress, his minion, his goddess," and, when he was forced to part from it, he caused the figure of it to be stamped on a gold medal, which he constantly wore about him.

The Western Plane (*Platanus occidentalis*), resembles the Oriental species in most of its characteristics, with sufficient permanent differences, however, to distinguish it as a species. In magnitude, it equals, if it does not surpass, its Oriental relative. Trees of this species, of no great age, are to be met with upwards of 100 feet in height. It is a native of North America, and is said to be the loftiest and largest tree of the United States. It was introduced into this country about the year 1636. As an

ornamental tree it is in no way inferior to the Eastern plane. It has the same peculiarity of shedding its bark in rough, shell-like flakes, which render the stem very picturesque, and acceptable to artists.

In some of the States of America it is called button-wood, from the resemblance of its seed-balls to old-fashioned buttons. Each seed is tipped with a kind of soft, woolly substance, which enables the wind to scatter it about. ALEXANDER WILSON, the celebrated author of "American Ornithology," writing about the orchard oriole and its nest, says of the latter: "The inside is usually composed of the light, downy appendages attached to the seeds of the *Platanus occidentalis*, or button-wood, which forms a very soft and commodious bed."

The tree, as we have already intimated, grows to a great size. One is mentioned as growing on the banks of the river Ohio that was forty-seven feet in circumference, and reached the height of twenty feet before it began to branch. As a timber, it is not considered of any particular value, on account of its aptness to warp. It takes, however, a good polish, and has its concentric rings remarkably interrupted by bright medullary rays.

The plane thrives well in the city of London. It is, indeed, eminently the Londoner's tree, and good examples of it are to be found in some of the densest

parts of the city. It was the tree chosen for planting on the Thames Embankment, as being the most likely to succeed under such unfavourable circumstances. There does not appear to be many of either sort growing in the immediate neighbourhood of Newcastle. One healthy specimen of the Oriental species is in the grounds at Ravensworth Castle, the dimensions of which have been sent me by Mr. GILLIE, the forester. It is about 40 feet high, the spread of the branches is 39 feet, and the girth of the trunk, at two feet from the ground, is 48 inches. The Western species seems to be somewhat more common than the other, but I am not aware of any specimens in the district that are remarkable for their size. Though size in a tree may safely be regarded as an attribute of majesty, it is not always one of beauty. Greatness of dimension affects the mind with a sense of veneration and awe. The more delicate sentiments of love and sympathy are, as it were, circumscribed and drawn out only by what is chaste and beautiful, and more within the range of ordinary observation.

Jesmond Dene, where so many kinds of plants revel in all the fascinating loveliness of their native character, is not without its western planes. The largest specimen is 42 feet in height, 30 feet in the spread of its branches, and 39 inches in girth at two feet from the ground. It is well-proportioned,

and, although it comes rather late into leaf, it is in very good health. This, and another of almost equal size, is growing on a patch of flat, rich, moist, but not stagnant ground, in the middle of the Dene, known as the "Nursery." I remember a good specimen, at Craggside, which Mr. WILSON, the superintendent at the Dene, thinks may be of the same stock, as quantities of trees and shrubs were, at one time, sent from the latter place to Craggside. The two above mentioned have every appearance of having been left in a nursery row, and, wisely undisturbed, attained their present stature.

In Saltwell Park, Gateshead, which, by the way, has a greater variety of trees in it than any of our local parks, there are several in very good health. The largest is 28 feet high, 23 feet in the spread of its branches, and 29 inches in girth at two feet from the ground. There is also one in the grounds of Dr. R. S. WATSON, Bensham Grove, which measures 29 feet in height, 30 feet in the spread of its branches, and is 30 inches in girth at three feet from the ground. It has been planted 27 years, and stands in a somewhat more exposed place than those already mentioned. The last I shall mention is in Messrs. FELL & Co.'s Nursery, at Hexham; it measures 30 feet in height, and is 48 inches in girth at four feet from the ground.

I have given these particulars of this singular, fine species of tree, not only on account of its own intrinsic merit, but of the special interest taken in it by people from the Metropolis. If they wish to plant a tree in their garden, the plane is usually the first one they ask about. An idea prevails that it won't grow about Newcastle, and this notion is entertained by some gentlemen for whose opinion I have the highest respect. In the face of such authority, I would not, therefore, myself recommend it to be planted extensively, but only here and there, as an ornamental tree that is to be specially cared for. A friend was condemning the planting of it to me, one day, and when I referred to some of the above examples, he qualified his remarks by asking: "But how did these trees get up?" The answer was very obvious to me!



THE HORSE CHESTNUT.

The Horse Chestnut (*Æsculus hyppocastum*) is a much admired and well-known tree. It is said to be a native of the mountainous parts of Asia, and was introduced into this country about the middle of the sixteenth century. When well grown, and standing singly, it is one of the most ornamental of park trees. In addition to its wealth of massive and luxuriant foliage, it is a tree of great floral beauty. Sir THOMAS DICK LAUDER well describes it "in all the richness of its heavy velvet drapery embroidered over with thousands of silver flowers." GILPIN, who is generally regarded as an authority in matters of picturesque taste, will not allow that the horse chestnut is a picturesque tree; indeed, he plainly calls it "a disagreeable tree."

It may be questioned how far it is safe to differ from the opinion of so eminent a judge; but, in this instance, I very readily venture to do so. Mr. GILPIN had a strong proclivity for the pencil, and was sometimes apt to view his objects too exclusively in the light of an artist; so much so, that he considered it no impropriety to remove a mountain, or at least alter one, that would not conform to the rules of art. According to the strictest definition of the word, the horse chestnut is, perhaps, not picturesque, but it is certainly not disagreeable to the general observer.

Those who have seen it in all the gorgeous intensity of floral display will hesitate ere they pronounce such a verdict.

I am very tolerant of Mr. GILPIN's prejudice against this tree, on account of a little tendency, I suspect, in myself to the opposite direction. It may be due to association ; but it was, I believe, from a row of horse chestnut trees that I first learnt to admire the pensive magnificence of the autumn woods, and to respect, with rightful sympathy, the pointed sentiments whispered by the sear and yellow leaf. The horse chestnut is a tree of rapid growth, and attains to a good height. The timber is soft, and very little used, except for boxes and minor articles. It has a very bitter bark, and furnishes a yellow dye. It is sometimes used in tanning also. The bruised nuts have a cleansing quality, and act as soap.

There are four or five sorts of the horse chestnut, more or less useful as ornamental trees for park or pleasure ground. The red flowered sort is a special favourite, and will grow almost anywhere. Wood new cut is 60 lbs. 4 oz. per cubic foot, and, when dry, 35 lbs. 7 oz.



THE WALNUT.

The Walnut (*Juglans rigid*), when well grown, is a picturesque and imposing-looking tree. There is a characteristic massiveness and strength about its trunk and thick, spreading boughs, that is very noticeable. It has a lofty and, generally, well-balanced head. The bark is rather light coloured, and, on the trunk, deeply furrowed. The somewhat graceful, pinnate foliage is of a yellowish-green hue, and makes a pleasing contrast to trees of a darker shade. The leaves, however, are late in expanding, and fall at the first touch of autumn frost.

The walnut makes a good park tree. Its deep, penetrating roots, and robust stem, enable it to make a powerful resistance to the storm. It requires ample room for its full development, and is very impatient of crowding. For that reason it has been called an unsociable tree, and does best when planted as a single specimen. As a timber, walnut has a strong lateral adhesion, and makes most excellent gun-stocks. It is easy to work, not liable to warp, and is beautiful in cabinet work. When green, it is 58 lbs. 8 oz. per cubic foot, and, when dry, 46 lbs. 6 oz. All know the fruit, and the oil extracted from it is said to be little inferior to that of the olive. The roots, bark, and leaves yield a brown or yellowish-green dye. The dye is said to have been used by

gipsies to stain the complexion of the children whom they stole. I remember a garden boy who had his appearance considerably changed merely by cleaning fresh walnuts for a few days. Time was the ab-stergent necessary to bring him back to his proper self again, and this it did very leisurely.

The common walnut is a native of Persia chiefly, and has been cultivated in this country since 1562. According to Mr. VIGNÉ, 12,000 ass loads of walnut kernels are annually appropriated to the oil-press in Cashmere, where walnut oil is preferred to that of linseed for ordinary purposes. *Juglans nigra* is the black hickory, or black walnut, of North America, and is said to be harder than its fellows. It is a rapid-growing tree, and, in good soil, it will attain a height of 50 or 60 feet in about 40 years. I may mention, by the way, that the *true* hickory is not a walnut, but a *Carya*, which furnishes a wood somewhat similar to ash, and is used for like purposes.

The most venerable walnut tree I ever saw is in the front of the mansion at Kinross. It has been supposed, probably, to be the oldest tree of the kind in Scotland. It is now much decayed, but has evidently, at one time, been specially cared for. I noticed a large stone had been built into a hole in its side, and plastered carefully over, doubtless for the purpose of keeping out wet and retarding decay. There are some fine old trees about Kinross, by the way, and I

cannot tell the strange feeling I had while sauntering among them. I remembered that "dear old daddy GILPIN," as WENDEL HOLMES calls him, had been there on a similar mission to myself, upwards of 100 years before, and had, doubtless, admired those same trees. Neither shall I forget the peculiarly deserted aspect of the fine old mansion, or cease to remember sitting in the quiet burial ground, looking out on the shimmering lake, and the antiquated weather-beaten ruins of the castle, where Queen Mary was once a prisoner.

THE BIRCH.

One of the most attractive of sylvan ornaments of our wild mountain scenery is, undoubtedly, the Birch—"the most beautiful of forest trees, the Lady of the Woods," says COLERIDGE. In form and foliage it displays a grace and elegance unsurpassed by any other native tree. Who that has ever seen can forget the magnificent and stately specimens which adorn the rugged, romantic pass of Killiecrankie? Long and tress-like sprays, glossy-brown, and fragrant, trickling around silver-like stems in the most bewitching forms, and the light, rippling motion of their dark, shining little leaves, pensively responding even to the gentlest touches of the

mountain breeze. We are reminded of a passage in the "Isle of Palms," where it says—

"On the green slope
Of a mountain glen we sat us down,
Among the fragrance of the yellow broom.
While, o'er our heads, the weeping birch tree streamed
Its branches, circling like a fountain shower."

Although justly celebrated for its singularly attractive appearance, the wood of the birch is of a very secondary quality. When in contact with the damp ground, it very soon decays ; but, if kept dry, and free from insects, it lasts a considerable time. Notwithstanding its being somewhat coarse-grained, it shows, when dressed, a kind of silky texture, which is very pleasing. It is manufactured into chairs, and other light furniture, and is an excellent wood for turnery purposes. In some parts, where the birch grows plentifully, it is cut up and extensively used in making staves for herring-barrels, and also for clog-soles. SELBY defines clogs as a kind of shoe worn during winter by agricultural labourers in the North of England and in Scotland. To me, there is a kind of "long ago" air about this definition that is rather amusing, and makes me feel a somewhat primitive individual. Often, as a boy, I have made the frosty welkin ring to the cheerful clatter of the clogs. They are still a good deal worn, particularly in Lancashire, among the mill people ; and

those who have been in any Lancashire town during an election, or when the mill hands turn out for dinner, will never forget the pattering tornado as long as they live. Neither will they fail to notice how gradually the storm eases off into single tat-tats as the parties reach their several homes.

The birch has a very wide northern distribution. It is extensively used in Norway and Sweden for fuel, as well as in making furniture. The bark, contrary to the character of the wood itself, is remarkably durable, and is used instead of tiles as a covering for houses. The Laplanders find in it a material for baskets, boxes, mats, and a kind of cordage for harnessing their reindeer. They also make the wood into waterproof boots and shoes—the legs being taken from the tree entire. In olden times, the tough bark of the birch was used in making canoes, and is still used for that purpose in the northern parts of America. Those who love LONGFELLOW, will remember it was in a birch canoe that HIAWATHA, the beloved,

“Sailed into the fiery sunset,
Sailed into the purple vapours,
Sailed into the dusk of evening.”

The small branches and twigs of the birch are made into brooms, and the young shoots and leaves yield a kind of yellow dye. Excellent charcoal is made from the wood, and also fine crayons for artists.

In its green state, birch wood weighs 65 lbs. 6 oz. per cubic foot, and dries to about 45 lbs. 1 oz. There are some 24 or 25 species, all natives of northern regions. Loudon tells us that the birch is the prevailing tree in all the woods and pleasure grounds belonging to the Russian nobility about Moscow.

Birch wine is another product of the tree, and is said to be a very refreshing beverage. It is made from the sap, which is procured by tapping in the same way as the maples are in America. Our own boyish enterprises of this kind were invariably failures. However, we licked our lips, and what was wanting in flavour was made up in fancy. There is something strangely fairy-like about the birch when covered with hoarfrost, and no one should miss an opportunity to see this exquisite touch of Nature's pencil.

A birch is called a *birk* in the North, and it is, doubtless, from this that we have that expressive word *birkie* applied to a tall, dashing, graceful, wild, mischievous, warm-hearted, honest, young shepherd.



THE ALDER.

The Alder, which is intimately associated with the birch in the scenery of our rivers and lakes, is one of the commonest of our indigenous trees. It is often to be met with in wet, marshy, and low land, where it displays more the character of a large bush than a tree. Many a secluded "yon burnside" is largely indebted to the alder for its romantic interest. GILPIN says, indeed, that it is "the most picturesque of any of the aquatic tribe, except the weeping willow." I have often admired it clustering, in bush-like form, by the side of some mossy pool, or fringing the "trotting burnie wimpling through the ground." There is a kind of pastoral beauty associated with the alder, notwithstanding some have objected to the deep and dusky green of its foliage, as tending to invest it with a melancholy aspect ; but, along with it, we always remember the lines—

"O, bonnie are our greensward hows,
Where, through the birks, the burnie rows,
And the bee bums, and the ox lows,
And saft winds rustle,
And shepherd lads on sunny knows
Blaw the blythe whistle."

The wood of the alder is of a soft and homogeneous texture, easily worked, and is sometimes made into chairs and tables. The planks from old knotty trees

are very beautiful, presenting a kind of deep, reddish colour; in consequence of which it is sometimes called "Scotch mahogany." It is a most durable wood submerged in water, and has been used for piles in the foundations of bridges from very early times; it, however, very soon goes to decay when exposed to alternations of dryness and moisture. Like the birch, it is frequently made into staves for herring-barrels. Indeed, this is its principal use, especially in the North. I have known it much prized for scythe handles, or "sneeds," as they are often called. It is also made into clog-soles, but not used so extensively for that purpose as the birch. Old alder wood is often found buried in peat bogs. It is then as black as ebony—for which it is often substituted—but it has not its lustre. The charcoal of the alder is very valuable, and is reckoned one of the best for making gunpowder. The bark is also used in dyeing red, brown, and yellow shades.

There are upwards of a dozen species and varieties of the alder. That known as the cut-leaved, (*Alnus laciniata*) is, perhaps, the best as an ornamental tree. The wood is 62 lbs. 6 oz. per foot, green, and, when dry, 39 lbs. 4 oz.

An old herbalist, in extolling the alder, declares that "the leaves gathered while the morning dew is upon them, and brought into a chamber troubled

with fleas, will gather them thereto, which, being suddenly cast out, will rid the chamber of those troublesome bed-fellows."

THE APPLE.

The common Wild or Crab Apple (*Pyrus acerba*), is frequently to be met with growing in woods, and by waysides, where it sometimes attains to the height of 25 or 30 feet. According to the usual standard of judging such matters, the apple cannot be considered a particularly handsome tree. The trunk is crooked, the branches rambling and confused, and spreading usually to a width greater than the height. In looking intelligently at nature, this character, after all, ought not to be considered a defect, but rather as a means of showing a special love for variety. Nature is never, in any way, a slave to pattern, but revels in a wealth of happy freedom, perfectly consistent with the principles of order. We call an object beautiful or disagreeable not so much because it really is so, as according to some preconceived notion we chance to have of that term.

Many people who have no sympathy with the free-and-easy way in which an apple tree spreads out its branches, will yet be in raptures to see the cloud-like profusion of its flowers. Scarcely anything in the temple of Flora herself is touched with a finer

delicacy of colour, or recalls more vividly the words of THOMSON—

“But who can paint
Like nature? Can imagination boast,
Amid its gay creations, hues like hers?
Or can it mix them with that matchless skill,
And lose them in each other as appears
In every bud that blows?”

In our early school-boy days, a large crab tree—which even now stands before the memory peculiarly associated with ideas of beauty and dread—was the object of our admiration, and the victim of our pillage. Near to it was a hideous water-pond, full of strange creatures “that from putrefaction breed,” and surrounded by a fir plantation—the winter resort of a veritable ghost. The tree was a profuse bloomer, but seldom did any of the fruit get to perfection. Our juvenile appetites were equal to it, even in its most acerb state. Strange as the expression may sound to some, this very crab tree has become to me a means of measuring the strides of social progress. After having been absent many years, I visited the spot one autumn, and found the tree loaded to the ground with “crabs, sun-reddened, with a tempting cheek.” This struck me as singularly different from what it used to be. A great change had evidently come over the tastes, and even the beliefs of the young people. They had now, it appeared, found grace to withstand the temptations

of a crab apple, which the youngsters of our day had not. The ghost, too, I was rather sorry to find, had departed, and, instead of the "wee, stuffy, stumpy, dumpy laddie, wi' plumpet kite and cheeks sae ruddy," clutching his white cotton wallet, and darting past the place as if the very ghost were at his heels, the young hopeful of the modern day is, perhaps, a little inclined to laugh at the credulity of saintly old grandfathers and grandmothers who believed in "ghaists" and witches.

The wood of the crab is hard, and of a brownish colour. It was formerly made into "cogs" for mill-wheels, and is still used in the construction of heads for "bettles," and other similar instruments. The young shoots make beautifully-knotted walking sticks, which are much esteemed for their durability. The weight of the wood varies considerably according to the condition under which it has grown. In a green state, it weighs from 48 to 66 lbs. per cubic foot, about a tenth of which it loses in seasoning. The crab is much valued as a stock on which to graft the better sorts of apples, and, according to GERARD, pomatum was so-called from its being anciently made of the pulp of the apples (*poma*) beaten up with "swine's grease" and rose water. A liquid known as verjuice is also got from bruised crab apples. The bark of the tree, in addition, yields a kind of yellow dye.

HENRY WARD BEECHER, speaking of the apple, says : " It will thrive in sandy loams, and adapt itself to the toughest clay. It will bear as much dryness as a mullein stalk, and as much wet as a willow. In short, it is a genuine democrat. It can be poor, while it loves to be rich ; it can be plain, although it prefers to be ornate ; it can be neglected, notwithstanding it welcomes attention. But, whether neglected, abused, or abandoned, it is able to take care of itself, and to be fruitful of excellences. That is what I call being democratic."

THE PEAR TREE.

The Pear Tree (*Pyrus communis*), is different in its habit of growth to the apple tree. The branches rise in a more upright direction, spreading out towards their extremity, and not unfrequently drooping in a manner graceful and pleasing. It attains to a height of from 40 to 50 feet ; and the wood, which is tolerably compact and durable, is used in making handles for joiners' tools, various kinds of carved patterns, and for several minor articles of a like character. The twigs, when ripened, are of a brownish colour, and the leaves much more hard and glossy than those of the apple. The

flowers are numerous, white, and showy, but not nearly so attractive as those of the apple; neither are they so large. The pear prefers a dry soil, and is found growing in woods and hedges in most of the counties of England. In its wild state, the branches are thorny, but the thorns in a great measure disappear when the tree is cultivated. Among the most useful of fruit trees, the pear is rivalled only by the apple. Its cultivation has been carried to a very high degree of perfection indeed, and that, too, from comparatively early times. As a tree, it attains to a considerable age, being much more hardy than the apple tree.

One of the most singular pear trees I have seen is in the nursery grounds of Mr. MATHESON, of Morpeth. It was an old-looking tree when the present proprietor's great-great-grandfather was a boy. The normal habit of growth would seem to be quite changed. Instead of the usual ramifications, the branches are flattened out like those of a cedar of Lebanon, but a little more upright. The soil in which it grows is a deep, sandy loam, with a gravelly subsoil, near the side of the Wansbeck, where it is rather a conspicuous object. This is not so much due to actual size, as to its singular appearance. It is 40 feet high, and eight feet in girth at one foot from the ground. It has been a very prolific bearer within the memory of persons yet living, but the

fruit of late years has been rather small. Mr. MATHESON, to whose courtesy I am indebted for the particulars of this venerable and interesting landmark of his forefathers, tells me that the last good crop borne was about a ton, and the tree was so much exhausted by the effort, as scarcely to be able to produce leaves the next season. The storm of October, 1881, destroyed several of the main lower branches. The fruit is of an inferior quality; but, on young trees, attains to a fair size. It is locally known as "Poor Man's Profit," on account of its prolific bearing. It is not often one has the age of a fruit tree verified by the direct testimony of five generations handed down from father to son, and it is more interesting on that account. Putting all the circumstances together, Mr. MATHESON thinks the tree cannot be less than 300 years old, and it may possibly be older. Judging from its appearance when I last saw it, and, providing that it meets with the same care as hitherto, it bids fair to go down to a yet distant posterity.

Many sorts of pears were known to the Greeks and Romans. The fruit was early cultivated in England, and, in GERARD's time, "threescore sundry sorts of pears, and those exceeding good," were growing in one garden. Most of the finer sorts of pears are grafted on stocks of the common kinds in various "cunning and curious ways." Even stocks

of thorn and mountain ash serve for that purpose.
COWLEY says—

“Man does the savage hawthorn teach
To bear the medlar and the pear ;
He bids the rustic plum to rear
A noble trunk and be a peach.”

In a household account book of HENRY VIII., there is a sum of twopence “to a woman who gaff the kyng peres.”

Perry of an excellent quality is produced from the wild pear, for the more austere the fruit, the better it is for that purpose.

THE WILD CHERRY.

The Wild Cherry or Gean (*Cerasus sylvestris*), is a tree deserving of notice, if for nothing else but the ideal purity of its blossom. But it has other attractions. The wood, which is of great value to cabinet-makers, is red-coloured, strong, close-grained, and of firm texture. It is easy to work, and takes a good polish. Furniture made from it is both beautiful and durable, and little inferior to that made from the commoner kinds of mahogany. It is not so much used in England as in France, where it grows more plentifully. As an ornamental tree, it is stiff and unyielding ; but is most beautiful in its clouds of

snow-white flowers. The autumn tints of its foliage are also very lovely, being frequently of a deep, purplish-crimson and yellow. The fruit is always a great attraction to youngsters; and I have myself some lively reminiscences in connection with two particular trees. They were claimed by the neighbouring farmer, but were really not his. Despite all his care, we generally managed to clear the fruit before he or the blackbirds had a proper chance. When surprised upon the tree, there was nothing for it but to drop into the dark jungle of nettles, and dash for the frontier of some friendly territory.

THE BIRD CHERRY.

In its wild state, the Bird Cherry (*Cerasus padus*), seldom attains to the dimensions of a tree. When cultivated, however, it sometimes reaches a height of 30 or 40 feet. It is of a loose manner of growth, and has rather thin, somewhat glaucous leaves, which are serrulated at the edges, and of an ovate-lanceolate shape. The young shoots are glossy, with a kind of purplish hue, and have small specks of white upon them. In the months of April or May, the tree is adorned with long strops or racemes of delicate snow-white blossoms. These, in their loveliness, soon fade, and give place to round, black, tempting-looking berries, which are very nauseous and bitter to the

taste, and are said to possess dangerous qualities. They are, however, soon eaten off by birds.

In certain parts of Northumberland the bird cherry is called the hag-berry, and the fruit is forbidden by all prudent mothers, who know its character. I have at this moment a very vivid recollection of a particular tree of this sort, which grew in the midst of a sylvan paradise I used to frequent in my boyhood—a little ravine, down the centre of an old wood, where wirpled a clear, crispy stream, its sinuous way through the fragrant thickets of hazel and brier, ever and anon darting out into sunny, secluded places, lovely with wild flowers, and drowsy with the humming of the forest bees. It was the first tree of the kind I had seen, and I remember tasting the tempting, rich, jetty clusters, with a result that was anything but pleasant. Notwithstanding the wonderful adaptability of a boy's appetite for fruit, the stringent qualities of the hag-berry could never be effectually overcome.

Although tolerably common in exposed places as a shrub, it requires a sheltered situation, and a fairly dry, good soil, to bring it to the perfection of a tree. The leaves, which are tender and liable to be torn by the wind, are often also completely destroyed by caterpillars, which seem to have a special liking for the species.

The wood, which is very bitter to the taste, is hard, takes a good polish, and is of a somewhat yellowish colour. In France, it is used by cabinet-makers ; but, in this country, it is little known for that purpose, probably on account of its not being procurable in sufficient quantity. In the wild state, it is more beautiful in Scotland than in England. In Sweden, Lapland, and parts of Russia, a strong spirit is distilled from the fruit.

Sir THOMAS DICK LAUDER mentions a bird cherry, which was growing fresh and vigorous at Drumlanrig, in 1773, that had a girth of eight feet. "On the banks of the Findhorn, and other parts of the North of Scotland," he says, "this tree often rises much above this size."

THE WHITE BEAM TREE.

The White Beam Tree (*Pyrus aria*), is a native of Britain, and may be known by its ovate-shaped leaves, which are covered with white down on the under surface. When viewed from a distance, just before the buds expand, the tree somewhat resembles that of the wild cherry in blossom. Like the rowan, it does not attain to a large size, and is well adapted for planting in grounds of a limited area. It seems also to stand the smoke of the town with considerable impunity. The fruit, which is much larger than that

of the rowan, is of a pale red colour when ripe, rather of a mealy consistence, and without any astringency.

There are three or four fine old trees of the kind at Hulne Abbey, in the Duke of Northumberland's Park, at Alnwick. Notwithstanding their undoubtedly great age, they are yet quite sound and healthy, and promise, in that most lovely, secluded spot, still to gratify the picturesque eye for many years to come.

The wood is very hard, of a fine grain, and used for various articles in turnery and other minor manufactures. Both the apple and the pear belong to this *genus*, and are of endless variety.

THE MOUNTAIN ASH.

The Mountain Ash or Rowan (*Pyrus aucuparia*) is a very interesting little tree, and many of its associations are both romantic and picturesque. It is often a pleasing ornament to the deep, secluded glens of mountainous and hilly districts, where it flourishes among the moist, disrupted rocks. In company with the pine, the birch, and the bracken, it is often a pleasing appendage to the secluded water-fall. At all seasons of the year the mountain ash is beautiful. In addition to the cheerful tints of its light and

graceful foliage, it bears conspicuous corymbs of fragrant and cream-white flowers ; but it shows to particular advantage in the clear, still days of autumn, when loaded with its clusters of coral-red berries. The berries, which in the North are called poison berries, are said to be intoxicating to poultry. As a boy, I have often tried the experiment, but could never succeed in making a hen druñk.

Rowan-tree wood is considered a spell against the powers of witchcraft, and I have frequently known a piece kept for the purpose. The circumstance is referred to in the old song of "Laidley Worm"—

"The spells were vain, the hag returned
To the queen, in sorrowful mood,
Crying that witches had no power
Where there is rowan-tree wood."

One of the most magnificent plant objects I think I ever saw was a rowan tree in full fruit. It was growing on the top of a moor-turf fence, not far from a shadowy pinewood. On one side was a stubble field, the sheaves of short oats still standing, their heads heavy with pearly dewdrops. Next the field, and skirting the fence were clumps of tall brackens and dwarf birch bushes, mingled with heather and tufts of brown bent. Here and there, a lichen-crusteð freestone sheltered the blue *polygala* or lingering hairbell. On the other side, sloping to the morning sun, lay the broad, mossy moorlands, softening into

green fields and fading hedgerows ; while, ever and anon, through the lofty colonnades of tapering pine trees, sweetly flowed the undulating music of a pebbly stream. In the centre of this rural panorama stood the solitary tree, spirit-like, and motionless as a picture ; its straight, clear, silver-dappled stem, symmetrically spread branches, light, pensile, pinnate leaves, and multitudinous clusters of shining, red berries, all combining to form an object of the most intense and exquisite beauty—"a joy for ever."

" Its loveliness increases ; it will never
Pass into nothingness ; but still will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing."

THE COMMON HAWTHORN.

The Common Hawthorn (*Crataegus oxycantha*) of the botanist, is admirable in a great diversity of ways. It is rarely, however, that it attains to timber-like size, and its wood, therefore, is not sufficiently plentiful to make it useful for general purposes. Even if it were plentiful, its aptness to split and warp in drying would, in a great measure, disqualify it. It is, nevertheless, of a hard, close, firm texture, and of a white or yellowish-white colour, and is susceptible of a fine polish.

According to LOUDON, the green wood weighs 68 lbs. 12 oz. per cubic foot ; when well-seasoned, it

is about 57 lbs. 3 oz. It is used by carvers and cabinet-makers, and by mechanics for tool handles. When the shoots are straight, and of two or three years' growth, they make excellent walking-sticks, though, probably, not of the same high belligerent renown as the shillelah, or sprig of blackthorn. In country places, old thorns are considered an excellent commodity for heating ovens, and many a lot of old fence I have seen used for that purpose.

Pleasing and romantic associations cluster round the hawthorn. Scarce a rural village or hamlet but boasts of its favourite tree, which is often a familiar link in the chain of young and happy memories. Everyone knows the old and familiar pathos of the "Deserted Village" and

"The hawthorn bush, with seats beneath the shade,
For talking age, and whispering lovers made."

Considered as a picturesque object, Mr. GILPIN is particularly hard upon the hawthorn. He considers it to have but little claim to picturesque beauty. In song, he says, the shepherd may, with propriety,

"Tell his tale
Under the hawthorn in the dale ;"

but "when the scenes of nature are presented to the eye, it makes but a poor appendage." I am very glad to differ with Mr. GILPIN concerning the character of this tree, much as I generally respect his opinion.

I consider the thorn picturesque in itself, and more particularly in connection with some ruined old castle or abbey, where it clings to the fretted and shattered wall with strange tenacity. I have often noticed it as a beautiful appendage to the arch of a bridge spanning some ravine, where the shade-loving wild flowers crowd down to the water's edge, and climb in fairy-like troops over the moist, moss-covered stones. It is also, very frequently, a pleasing and picturesque object in connection with old-fashioned homesteads, luxuriating in some quiet corner of the stackyard, or giving an air of romance and witchery to the rustic well, where, in the cool summer evening, lingers the russet-cheeked maid with her pitcher, herself as pure as the plashing spring, and sweet as the hawthorn blossom. Much of that intense love most people have naturally for quiet country lanes, with their lacework of bramble and brier, is due to the presence of the hawthorn. Hawthorn hedges are a pleasing characteristic of English landscape, particularly when in blossom, "fragrant, filling the air with a strange and wonderful sweetness." No plant makes a more neat or compact fence, or has a more cheerful aspect. It is only, however, when in bloom, and left to its own freedom, that it assumes a picturesque appearance, and becomes the

"Glory of England's landscape ! favourite tree
Of bard and lover ! it flings far and free

Its grateful incense ; whether you arise
To catch the firstling sun-gleams in the skies,
And list the early bird notes ; whether you
Linger amidst the twilight and the dew,
There, through the silent air, its odour strays,
Sweet as the home scenes of our early days."

THE POPLAR.

Poplars are mostly trees that grow very rapidly, and to a great size. The wood is light, like that of the willow, and of a white, or yellowish colour. It is tolerably durable when kept dry, and is not liable to warp or twist. It makes good flooring boards for manufactories and other buildings, as it does not ignite readily, and burns slowly without much flame. It is also a wood that does not split easily, and is, therefore, good for the cleading of stone carts and waggons. Like the willow, it is used by the brush-maker, and for making various kinds of packing cases and boxes. There are several species of poplar, all of which delight in moist soil. As ornamental trees, some of them have good qualities. There is the grey or common white poplar (*Populus canescens*) worthy of a place as a park tree in low situations, or near water. It grows with a clear, straight stem to a great height. Then there is the abele tree (*Populus alba*), which is large and spreading, and, in many respects, like the last. Its leaves, however, are more

deeply lobed, and are whiter on the under surface, and the branches have a more horizontal growth. It was first introduced into this country from Holland (where it abounds), and is principally known as Dutch beech. The boards and rollers around which silk and other material is wrapped are often made of this wood. It is particularly suitable for the purpose, as it is very clean ; and its lightness adds but little to the cost of carriage.

The aspen (*Populus tremula*) is a native tree of elegant growth, having a clean, white stem, and an ample, somewhat drooping, pendulous head. Its fine, rich, green foliage rustles and trembles with the slightest breath of air. In the north, it is frequently found picturesquely associated with the birch, the alder, and the mountain ash, "where rustling turn the many twinkling leaves." There is a lingering superstition in the Highlands of Scotland that the trembling motion of the leaves is owing to its having been the wood of which our Saviour's cross was made. The circumstance is mentioned in "Voices from the Woodlands," by MARY ROBERTS :—

"The tremulousness began, as legends tell,
When He, the Meek One, bowed His head to death,
E'en on an aspen cross ; when some near dell
Was visited by man, whose every breath
The sufferer gave them. Hastening to the wood—
The wood of aspens—they, with ruffian power,

Did hew the fair pale tree, which trembling stood,
As if awe-struck ; and from that fearful hour
Aspens have quivered, as with conscious dread
Of that foul crime which bowed the meek, Redeemer's head."

I well remember three aspen trees that grew together, in the corner of a little plantation, near my father's cottage ; how, as a boy, I used to lie at nights in bed, and listen to the soft rustling of their leaves, and during the day often watch, with the wondering curiosity of youth, how they twinkled, ever sportive and restless, against the summer sky. The aspen is very abundant in Russia, particularly about Moscow ; and it has been mentioned as an interesting fact that, in 1813, the year after the burning of that ancient city, innumerable seedling plants sprung up, in every direction, among the ruins.

The black Italian poplar (*Populus nemifolia*) is, perhaps, the most valuable and ornamental of the species. It grows with great rapidity, shooting up in pyramidal form, to a height of from 90 to 100 feet. It produces timber of large scantling, and of a greyish-white colour, which, when well-seasoned and kept dry, is tough and durable. For flooring about a manufactory nothing can surpass this poplar. As an ornamental tree, it is sometimes objected to on account of its lateness in coming into leaf. It, however, well deserves a place in every collection, as

there is a strange, indescribable mellowness about its appearance, during the quiet days of autumn, that never fails to arrest attention, more especially when the tree is in a young and promising state.

The Lombardy poplar (*Populus festigiata*), is a well-known and remarkable tree—remarkable chiefly for its total want of horizontal branches, and for its tall, compressed form of growth. In favourable places, it is a very rapid grower, having been known to attain a height of upwards of 125 feet in about 50 years. It has a pleasing effect about buildings sometimes, when not in too great profusion. In the latter case it becomes monotonous. The Lombardy poplar has one beauty, almost peculiar to itself, and which is poetically mentioned by LEIGH HUNT—

“The poplar’s shoot

Which, like a feather, waves from head to foot.”

I shall mention but one other sort, that is the balsam poplar (*Populus balsamifera*), remarkable for its early bursting into leaf, and the balsamic perfume of its opening buds. It is a native of North America, and was introduced in 1692. It makes no claim to being either an ornamental or specially useful tree ; but is certainly deserving of consideration for its exquisite odour in spring.

Although a very hardy tree, it likes a moist, sheltered locality to grow in, especially near a stream,

and, as its roots run near the surface, and throw up numerous suckers, it should never be planted on a lawn.

The tree is sometimes called Tacamahca, and, according to Dr. LINDLEY, it, in common with other poplars, yields the bitter, aromatic substance known by that name. Tacamahaca, however, is procured from several kinds of trees, and is used in various medicinal compounds.

THE WILLOW.

The Willow is a tree frequently possessing a considerable share of picturesque interest. Whether it be regarded as an appendage to some romantic foot-bridge, or as an object by the side of some glassy pool, it is equally becoming and graceful.

There are upwards of 200 species and varieties of this kind of plant enumerated by botanists, varying in height from a few inches to 80 or 90 feet. About 90 of them are said to belong to the British *flora* alone. There is reason, however, to suspect that many of the so-called varieties can only be distinguished by the keen eye of the specialist. Comparatively few of the species grow to trees of any magnitude.

That known as the white willow (*Salix alba*), is considered as one of the best of the tree sorts. It

grows to a great size, and is of an elegant and picturesque outline, being, as Mr. GILPIN justly expresses it, "fit to appear in any scene." It has a silvery plume-like foliage, which gives an air of grace and lightness to the landscape.

The species recognized as the Bedford Willow (*Salix Russeliana*) is also a large and rapidly growing tree, and was a special favourite of Dr. JOHNSON'S. One which grew at Lichfield, in his day, was 21 feet in girth at 6 feet from the ground ; it had a stem 21 feet in length below the ramifications, and an enormous head. Such an object could not fail to make a deep impression on the memory and rich imagination of the youthful SAMUEL, whose birth-place Lichfield was.

The wood of the willow, generally speaking, is tough, elastic, and durable. It makes excellent flooring for manufactories, and does not split readily ; neither is it easily set on fire, and it is of slow combustion. It is used for a variety of purposes, being specially good cleading for stone carts. It is also used by brush-makers, and for the making of bats. A cricket bat, I believe, is known among professionals as "the willow."

The red-wood willow (*Salix fragilis*) possesses most of the qualities of the Bedford Willow, and is strong in the bitter element called salacina. It

yields also a purple-red dye, and a greater proportion of tannin is got from the willow than even from the oak itself. Most of the kinds may be grown for basket-making purposes, but some sorts are better adapted to that use than others.

In poetry, frequent allusion is made to the willow. The willows by the waters of Babylon awaken tender and melancholy reflections in connection with the captive children of Israel. They wept when they remembered Zion, and did hang their harps upon the willow! This particular willow, known as *Salix Babalonica*, is said, with questionable veracity, to have been first planted in England by POPE, at his villa, at Twickenham. The story is that the poet, having got a basket of figs from Turkey as a present, observed one of the twigs of the basket putting out a shoot. He immediately planted it in his garden, where it soon became a fine tree, from which stock all the weeping willows of this species have come.

Salix caprea (goat willow, or saugh) is that which is known in Scottish song as the "siller saugh." TANNAHILL makes beautiful mention of it in his song of "Gloomy Winter's now Awa'"—

"Towering o'er the Newton woods,
Lavrocks fan the snaw-white clouds;
Siller saugh, wi' downie buds,
Adorn the banks sae brierie, O!
Round the sylvan fairy nooks

Feathery brackens fringe the rocks,
'Neath the brae the burnie jouks,
And ilka thing is cheerie, O !”

The saugh never attains to a large size ; its shoots, when two or three years old, are used for making hoops. There is the Saugh-tree station on the Waverley route to Edinburgh, which place will probably retain the name when the whole system will have shared the fate of the famous Burygold railway.

There is another species which I venture to mention as being, in my opinion, specially adapted for planting as a town tree in small areas. It is known to botanists as *Salix Meyeriana*. It is a native of Pomerania and Sweden, and was introduced in 1822. It has not the fine fragrance of our own lovely *S. pentandra*, which it much resembles, but it is quite its equal in every other respect. The leaves are large, broad, and shining, slightly serrated at the edges, and rather pale beneath, but not glaucous. The maximum height to which it attains, in favourable situations, is about 30 feet. When allowed plenty of room in its young state, it quickly assumes a sturdy tree-like character. One would like well to see both this and *S. lucida* (another most admirable species), more frequently planted about our suburban residences. In the months of April and May, the flowers of both those sorts are very attractive. The

writer has been told by the Rev. Mr. LEEFE, well known for his life-long study of the willow, that Northumberland is particularly rich in the number of its species.

The rapidity with which the willow grows is sometimes extraordinary. I have seen a single shoot, upwards of fifteen feet, grown from a cutting about nine inches long in one season.

THE SCOTCH PINE.

Probably the most important of our native forest trees—next to the oak itself—is the Scotch Pine (*Pinus sylvestris*) or Scotch fir, as it is commonly, but erroneously, called. It may be considered the representative tree of Scotland, more particularly of the Highlands, where it grows in its highest perfection. The timber is called the red or yellow deal, and, with the exception of that of the larch, it is the most valuable and durable of the whole genus. That produced in cold, elevated situations is of a quality superior to that met with in lower and less exposed places. It is not in any way inferior in quality to that imported from Norway and Sweden of the same species.

Usually, the pine is found in dense forests, or crowded clumps, where it grows tall and upright, having few side branches—with the exception of those

at the top—thus furnishing clean, straight stems of almost uniform thickness. When growing detached, and freely exposed to the light and air, it assumes a very different character. The trunk becomes thick and massive, the branches large and spreading, which, with the rough, deeply-furrowed, grey and red bark, combine to give the whole tree a peculiarly rugged and picturesque appearance. In some parts of the Highlands it attains to a height of from 80 to 100 feet, and from 6 to 12 feet in girth near the base.

What a beautiful and spirit-stirring reference is made by COLERIDGE to the pine in his "Hymn before Sunrise in the Vale of Chamouni :"—

"Sing, ye meadow-streams, with gladsome voice !

Ye pine-groves, with your soft and soul-like sounds !"

SHAKESPEARE, speaking of the force of truth entering a guilty conscience, compares it to the sun which—

"Fires the proud tops of Eastern pines,

And darts his light through every guilty hole."

Sir WALTER SCOTT describes it as it appears in its Highland home—

"Aloft the ash and warrior oak

Cast anchor in the rifted rock ;

And, higher yet, the pine-tree hung

His shattered trunk, and frequent flung,

Where seem'd the cliffs to meet on high,

His boughs athwart the narrow sky."

BEATTIE makes a happy allusion to the pine in his little poem on "Retirement"—

"Thy shades, thy silence, now be mine,
Thy charms my only theme ;
My haunt the hollow cliff, whose pine
Waves o'er the gloomy stream."

TANNAHILL sings in plaintive notes—

"Yon could sleety cloud skiffs along the bleak mountain,
And shakes the dark firs on the steep rocky brae ;
While down the deep glen bawls the snow-flooded fountain
That murmured sae sweet to my laddie and me."

Pinus sylvestris is claimed to be a native forest tree of England as well as of Scotland. GERARD, who wrote in 1597, says : "I have seen these trees growing in Cheshire, Staffordshire, and Lancashire, where they grew in great plentie, as is reported, befor NOAH's floud ; but then being overflowed, and overwhelmed, have since, in mosses and waterie moorish grounds, very sound and fresh until this day ; and so full of resinous substance that they burn like torch or linke, and the inhabitants of those countries do call it *firre* woode, and *fire* woode, unto this day." There is abundant proof of its having been plentiful in Ireland in olden times. Large trunks are frequently dug out of peat bogs in various stages of preservation, some being entirely decayed, others quite sound, and fit for building purposes. According to Mr. JOHNS, the depth at which they

lie beneath the surface varies from eight to fifteen feet. The same author tells us that the "trunks of oak are often found lying in the gravel beneath the peat, but fir has never been noticed in such situations. They are invariably rooted in the peat."

In Russia, many of the roads were formerly made of pine trees, varying from six to twelve inches in diameter at the thickest end. They are laid side by side, the thick ends of the one alternating with the small ends of the other. The top branches are allowed to remain on, so as to form a kind of rough hedge along each side. They are called "corduroy roads," and a friend of mine testifies to the effect the inevitable joltings have on the equanimity of certain travellers. It has been said by someone that the "blues" will not ride on horseback with a man; neither would they be disposed, I think, to drive with him along one of those "corduroy roads," more particularly if he were in a hurry, and the road itself a little out of repair.

There are more extensive forests of this particular species of pine than of any other of the genus. Besides being very abundant, it is also the most valuable for its timber, and enters largely into commerce under a variety of names, as Dantzic, Riga, and Memel fir. That known as the Dantzic fir, or as it is locally called, red-wood, comes from

the extensive forests on the borders of Russia, Prussian Poland, and Prussia proper. It is floated down the river Vistula in large rafts to Dantzic, the place of shipment, from which it has derived the name by which it is at present known to commerce. The Riga fir is also a variety of this species, having wood of the same whitish colour and slightly red tinge. It comes more from the interior of Russia, and is brought down the river Dwina to Riga. Memel is another variety that takes its name from the place of shipment. It grows in a district comparatively sandy, and, consequently, rather flat. It is floated down the river Memel, or Neimen, to the sea. The Dantzic fir, or more properly speaking, the Dantzic pine, is that most extensively used for both civil and naval purposes. It is taken as the standard of quality in judging all kinds of pine and fir timber. Anent this, there is some consolation to ourselves in knowing that there is claimed for the Highlands of Scotland a variety of this pine, known as *Pinus sylvestris horizontalis*, "that is similar, in every respect, to the best Baltic pine," and is highly prized. Though there are upwards of fifty species of the pine proper, but a very limited number are specially noted for their timber qualities. As objects of ornaments they are, most of them, interesting.

THE AMERICAN RED PINE AND PITCHER PINE.

The American Red Pine (*Pinus rubra*) is well known and esteemed for its timber. The common name, red pine, is from the colour of its bark, which is of a somewhat redish hue. The tree is a native of Canada and the United States, and attains to a height of from 70 to 100 feet ; it is rather slender in proportion. The wood itself is white, tinged with yellow or straw-colour. It is tolerably strong and elastic, having a clean, smooth grain, with a silky lustre when dressed. It is considered a valuable wood for building purposes, as well as for domestic uses. It was introduced in 1756.

Yellow pine (*Pinus strobus*) perhaps better known in this country as the Weymouth Pine (so named in honour of Lord WEYMOUTH, who introduced it in 1705), is, in America, called the white pine, while the timber it yields is the yellow pine of commerce. It is a tree, when full grown, of considerable dimensions, attaining to a height of from 100 to 150 feet. It has a large, straight, massive trunk, with short branches, which flatten into a picturesque head as the tree grows old. The bark is smooth, and rather of a light greenish-grey colour. The leaves are in fives together, slender, somewhat glaucous, and from three to four inches long. As an ornamental or park

tree, it is very effective, and usually grows rapidly in any good sandy soil that is moderately dry. Mr. LASLETT tells us that "nearly all the lower masts, yards, and bowsprits of large ships, are made of yellow pine."

American pitch pine (*Pinus rigida*) is, in many respects, a valuable species. It is a species very accommodating in its disposition, and will grow in almost any kind of soil. It is of a good habit, and makes an excellent specimen plant for the park or pleasure-ground. In its native country it attains to a height of from 50 to 80 feet, with a dense mass of dark green foliage. The leaves are stiff and sharply pointed, arranged usually in threes together, and are from three to four inches long. Large quantities of pitch are procured from this species, the yield being greater from trees growing on dry ground. The timber is straight in the grain, clean, hard, heavy, strong, and durable, besides being very resinous, and of a redish-white colour.

The cluster pine (*Pinus pinaster*) is a well-known species, and is often a characteristic object in pleasure grounds. It was introduced by GERARD, about 300 years ago, and is, perhaps, the most extensively planted of any of the foreign pines. It is a native of the south of Europe, and attains a height of 60 or 70 feet. Unlike the generality of the trees of this genus, it roots deeply into the soil, sending out

but few side fibres near the surface. A somewhat dry, sandy situation suits it best. As an ornament, or for the purpose of shelter only, it is one of the very best trees to plant in the neighbourhood of the sea. In its native place it grows most abundantly in such localities. When in a young state, it displays the usual formal habit of growth, but as the tree acquires age it becomes irregular, and often assumes a picturesque appearance. The leaves are in pairs of from six to eight inches long, and of a rather lightish green. A special feature is the star-like clusters of large cones that adorn the branches. There are usually six or eight together, but it not unfrequently happens that twenty or thirty meet in one cluster. It is from the star-like arrangement that the specific name of *pinaster* is derived.

The wood is of a rather soft, open texture, with little durability in its fibre. On the Continent it is used for packing cases, and other minor purposes; but it is totally unsuited for any important work.

The chief commercial value of the tree lies in the quantity of resin, tar, and lamp-black it produces.

The manner of procuring the resin is as follows: Trees of a suitable age are chosen, and at a particular season a longitudinal slit or groove is made through the bark, about six inches wide, and a foot or so long. A kind of cavity is formed at the lower end,

into which the resin drains. After being collected in sufficient quantity, it is melted in a kind of cauldron, and then strained through straw, to free it from impurities ; after which it is put into barrels, and is fit for market.

The best lamp-black is got by burning the straw through which the resin has been strained. It is burned in a stove, the smoke passing into a chamber with an opening in the top, such opening, being covered with a conical-shaped flannel bag kept up by rods, serves as a filter to the lighter part of the smoke. After the heated air has had time to escape, the soot which has settled about the chamber and the bag is collected, and packed into small barrels. Lamp-black is sometimes obtained by burning the resin itself in a kind of lamp which has the chimney surrounded by a flannel to gather the soot. It is from this particular method of obtaining the substance that the name is derived. The tar, pitch, and oil of turpentine which the tree produces is said to be inferior in quality.



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THE LARCH.

The most important of the *coniferæ* tribe next to the common pine is the Larch (*Larix Europæa*). With, perhaps, the exception of the pine itself, no tree has been more extensively planted in this country. It was introduced about the year 1629, and was soon found to grow very rapidly in almost any kind of soil sufficiently dry and porous to prevent accumulation of water at the roots. It makes little progress in cold, damp places, and under such circumstances seldom lives beyond a few years. It is a native of several of the mountainous regions of Europe, occupying the deep, sloping chasms and gullies to a height of sometimes 5,000 feet above the sea-level.

It has been observed to give preference to a northern aspect, where it luxuriates and attains to its greatest dimensions, reaching a height of from 80 to 100 feet, with a circumference of from 9 to 15. Indeed, so well has it adapted itself to our climate, that trees of dimensions equal to the above are by no means uncommon in favourable localities, such, for instance, as the rich, shelving sides of some of our river valleys.

When well grown, the larch is a stately and magnificent object, having a straight tapering stem, with gracefully drooping, somewhat small branches. The

numerous twigs, which are rather yellow coloured, are furnished with brush-like tufts of light green foliage, and in spring the young cones are beautifully rosy-red or white, according to the variety, changing as they ripen into light brown. The whole tree has a kind of picturesque aspect quite peculiar to itself, and, when happily introduced into woodland glens, gives the scene a richness and grandeur which is very striking, rising over the dark forest, as one has it, "like an obelisk of beryl."

WORDSWORTH, in his "Description of the Scenery of the Lakes," has the following remarks upon the larch, which, I think, few will accept without considerable qualification: "It must be acknowledged," says he, "that the larch, till it has outgrown the size of a shrub, shows, when looked at singly, some elegance in form and appearance, especially in spring, decorated, as it then is, by the pink tassels of its blossoms; but, as a tree, it is less pleasing than almost any other. Its branches (for boughs it has none) have no variety in the youth of the tree, and little dignity even when it attains its full growth; leaves it cannot be said to have, consequently, it affords neither shade nor shelter. In spring, the larch becomes green long before the native trees; and its green is so peculiar and vivid that, finding nothing to harmonize with it wherever it comes forth, a disagreeable spot is produced. In summer, when all

other trees are in their pride, it is of a dingy, lifeless hue ; in autumn, of a spiritless, unvaried yellow ; and in winter it is still more lamentably distinguished from every other deciduous tree of the forest, for they seem to sleep, but the larch appears absolutely dead."

In this description, WORDSWORTH seems to have entirely overlooked the fact that a considerable amount of picturesque effect arises from contrast. The tapering, upright form of the larch, undoubtedly, does not harmonize with spreading, heavy-foliaged trees ; yet, notwithstanding this, I have seen it give, what appeared to me, a very pleasing relief to views that would otherwise have been of a sleepy, monotonous character. The eye delights in contrast as well as in harmony, and, perhaps, the harmony of a scene is often the result of contrast in its parts.

According to popular account, the first larches planted in Scotland, at Dunkeld, were brought from Italy, along with some orange trees, and other plants, and were for some time kept in the hothouse. Not thriving under such treatment, they were transplanted into the open ground, where they soon began to grow with their natural vigour. This was in the year 1727, and two of the original trees are yet standing. The honour of being the first extensive planter of larch belongs to JAMES, Duke of Athol. From 1727 to the death of the grandson of the then

Duke, which took place in 1830, nearly ten thousand acres of larch had been planted upon the property of Blair and Dunkeld, and the aggregate number of plants used during that period was 14,096,719. We learn from Mr. HUGH FRAZER, that "in one of the large Scotch nurseries alone, from one to two tons of seed are required to meet the demands of each spring for young plants." It is unnecessary to say that the larch, as a timber tree, is of very great value, being close-grained, strong, and durable. We learn also from MATHEW that the first instance of British-grown larch being used for naval construction occurred in 1809, in the Tay, where the upper timbers of a sloop which had become decayed were repaired with it. Eighteen years afterwards this vessel became a wreck, and part was washed ashore on the Fifeshire coast, when it was found that the wood of the repaired portion was as tough and sound as when first used. A few years afterwards, a fine brig called the "Larch," was built by the Duke of Athol, and, in 1820, a frigate, of twenty-eight guns, called the "Athol," was finished, being entirely of larch, from the newly-created forests of Blair and Dunkeld.

Larch timber is a good deal used by carpenters and cabinet-makers. It takes a good polish, and furniture made from it is very beautiful. The old masters used larch panels to paint upon, and we are informed by Mr. GILPIN that many of RAPHAEL'S

pictures are painted upon boards of this description. The remarkable durability of the wood renders it extremely useful for many rural purposes, such as the construction of railings, foot-bridges, rustic summer-houses, and the like. It also makes most durable net-stakes for farm purposes. When well-seasoned, it is very light, weighing not more than $30\frac{1}{2}$ lbs. to the cubic foot. Liability to warp is an objection to its use; but it has the redeeming quality for building purposes of not being easily set on fire, and it does not burn rapidly. When ignited, it sends out a considerable amount of heat, but, being apt to fly out in fiery sparks, it is rather unsafe to use as a fuel. It is from this tree that the Venice turpentine of commerce is procured. The bark is also of considerable value for tanning. The Siberians are said to make use of the inner bark, mixed with rye-flour, in preparing a sort of leaven, when the "better article fails them."

There is an American species (*Larix myrocarpa*), which is described as a slender tree, reaching a height of 80 or 100 feet, the wood of which is strong and remarkably durable. The descendants of the Dutch settlers in New Jersey called it "tamarack." It was first introduced into this country in 1739; but, being a slow grower, and rather particular in regard to soil and situation, it has never been planted except

as an ornamental tree. It is known as the American red larch ; and is also, in the United States, commonly known by the name of "hackmatack."

THE SPRUCE.

X

The common Spruce (*Abies excelsa*), under favourable circumstances, is a very attractive tree. As a species, it is distinguished from the true pine by having the short needle-like leaves scattered irregularly along the branches, and, in some of the sorts, more or less distinctly in rows. When in its young state, it is more beautiful and elegant than the Scotch fir, being of a more exact and regular shape, and commonly feathered to the ground. At such a stage, the branches grow in a horizontal or slightly upward direction, but as they increase in age and length they become partially pendent ; the ends, however, always continue to turn upwards. Thus, the general contour of the tree assumes a graceful and plume-like appearance. Notwithstanding this, its formality offends the picturesque eye, which is generally fastidious to all precision and regularity in such objects. Mr. GILPIN himself objects to its formality, and considers it rather disagreeable to see such a repetition of feathery *strata* as that shown by the branches rising tier above tier from the bottom of the tree to the top. For my own part, I do not

remember to have ever seen a well-grown tree of any kind that I considered disagreeable. Though the spruce fir and other trees of a like character and habit want that variety of line necessary to make them picturesque, as individuals they are, nevertheless, particularly picturesque when associated with Alpine scenery.

The spruce fir is, perhaps, most beautiful in the younger stages of its growth. It is then green to the very ground, and of that easy symmetrical form which makes it so well adapted for use as a Christmas tree. It is not regarded as a native of Britain, though its introduction is supposed to have taken place at a very early period. It is mentioned in a work published in 1548, entitled : "Names of Herbs." The spruce is very abundant on the moister kinds of soil in Norway, Sweden, Denmark, and Lapland ; also in Germany, the Alps of Switzerland, Siberia, and the north of Russia. In the south of Norway it grows at an altitude of 3,000 feet above the sea level ; and, on the Lapland mountains, as high up as 1,000 feet, which proves it to be a very hardy tree. As a timber, it is light, elastic, and durable, and is susceptible of a high polish. It is used for scaffold-poles, ladders, spars, masts, &c., and is largely imported for those purposes. The planks and deals are used for flooring, and the trunk of the growing tree yields an immense quantity of resin, from which

Burgundy pitch is made. In favourable circumstances, in its native district, the spruce fir will attain a height varying from 120 to 160 and even 180 feet. There is one in the grounds at Studley Royal, 133 feet high, and $12\frac{1}{2}$ feet in circumference, reckoned the largest and loftiest tree in England, and is said to have been planted by EUGENE ARAM. From the above figures, one may form an approximate idea of the august proportions of that strange and yet familiar personage sketched by MILTON—he whose

“Spear to equal which the tallest pine
Hewn in Norwegian hills, to be the mast
Of some great admiral, were but a wand
He walked with.”

Imagination pictures him sad-hearted and weary, plunging with “uneasy steps over the burning marle ;” his battered shield “hung on his shoulders like the moon, whose orb through optic glass the Tuscan artist views.”

The bark of the common spruce is used for tanning purposes, and in Norway and Sweden the thin inner portion is made into baskets. The small flat branches are frequently used by gardeners for protecting wall trees that are in blossom, against spring frosts. Even as a hedge plant the spruce has been found to succeed in suitable soils, and it bears clipping wonderfully well. Amongst the American species is that known as the single or white spruce (*Albies*

alba). It is a tree of moderate growth, reaching from 30 to 40 feet high, and from 1 to 2 feet in diameter. It is a native of Canada and the United States, and, according to Mr. LASLETT, furnishes "the only deals shipped to this country from Canada as a clearly defined class," and which the same authority states are extensively used in carpentry, ship, and engineering works. When growing, the general appearance of the tree is much lighter than that of any other species of spruce. The leaves have a light glaucous hue, are less thickly set on the branches, and more pointed than most of the species. The cones are rather small, of a longish-oval shape, and light-brown colour. It is one of the hardiest of the species, and was introduced into Britain in 1700. Considerable points of contrast are offered to the above in the black American spruce, (*Abies nigra*). It is a larger growing species, reaching a height of from 50 to 80 feet, and, like the white spruce, is found in the coldest regions of Canada and the United States in considerable abundance. The leaves are dark, short, stiff, and thickly set round the branches. The cones are rather small, and, when ripe, of a dark, reddish-brown. It was introduced simultaneously with the white spruce, and has considerable reputation as an ornamental tree, thriving well in a cold, moist soil.

The wood is strong and elastic, and is a good deal used in America for shipbuilding purposes. It is also the species which furnishes the famous American "spruce beer," of which COBBETT says he had no other sort of drink, except by mere accident, for seven years of his life.

The hemlock spruce (*Abies Canadensis*) is a native of the same country, and is a very beautiful and much-admired tree for ornamental purposes. It is particularly elegant and attractive in its young state. The branches are then gracefully pendulous, and the leaves of a light, pleasant green on the upper surface, with a glaucous hue beneath. In its native country it reaches a height of from 60 to 80 feet, and is always found in the greatest perfection on the edges of swamps, and in moist, deep, alluvial soils. As a timber it is of little or no value ; the bark, however, is held in some repute for the tanning of leather, and when mixed with bark of oak is said to be invaluable for the purpose. It was introduced into this country in 1736.

"O hemlock tree ! O hemlock tree ! How faithful are thy
branches !

Green not alone in summer time,
But in the winter's frost and rime !

O hemlock tree ! O hemlock tree ! How faithful are thy
branches !"

THE SILVER FIR.

In general appearance and habit of growth, the Silver Fir (*Picea pectinata*) very much resembles the spruce. By some writers they are placed in the same genus. There are, however, several well-marked differences, which seem to justify their separation. The leaves are, for the most part, longer and more flattened than those of the spruce, besides being silvery beneath, and disposed more decidedly in two rows along the branches. The cones of the silver fir are invariably erect, while those of the spruce are pendent. There are other differences of a less obvious character, which need not be mentioned here, but which further support identification. As there is a decided difference in the appearance of the three typical forms of *Pinus*, *Abies*, and *Picea*, which I have chosen, those botanical niceties may seem unnecessary.

None of the *Picea*, or silver fir family, are natives of Britain. The common silver fir was introduced from the Alps about 1600, and has been extensively planted as a forest tree. Mr. LONDON considered the common silver fir the noblest of its genus in appearance, and the only species worthy of cultivation in Britain for its timber. It is used for various kinds of carpentry, principally for boat-building, and it yields a quantity of resin, from which the Strasburg

turpentine is taken and manufactured. The wood is about 67 lbs. per cubic foot when green, and seasons to about 40 lbs. The finest specimens of the tree are to be found in sheltered valleys where the soil is of a rich alluvial character. As a picturesque tree, its formality is objected to, as in the case of the spruce. It is, however, in its own particular way both stately and ornamental. There are several species belonging to the section, and some of them the most beautiful of our hardy evergreen trees. A few of these may be here mentioned.

The great silver fir (*Picea grandis*), found growing in the valleys and river banks of Northern California, where it reaches the magnificent height of from 200 to 280 feet, was introduced into this country in 1831.

The lovely silver fir (*Picea amabilis*), found also in Northern California, on the mountains near Fraser's River, at an elevation of from 3,000 to 4,000 feet, attains a height of 150 to 250 feet, and was introduced in 1831. The same year was introduced the noble silver fir (*Picea nobilis*), another native of California, where it is found growing at an altitude of from 5,000 to 8,000 feet. It is a very distinct species. The branches, which spread out horizontally, are perfectly flat, and are remarkable for the denseness of their foliage. As a specimen it is almost unrivalled for the lawn, and is considered one of the

very finest of the *Picea* tribe. In its native haunts it reaches a height of from 150 to 250 feet. NORDMANN's silver fir (*Picea Nordmanniana*) is from the Crimea and the Alpine districts of the Black Sea, where it grows in considerable abundance. Unlike the others, it has some reputation for its timber, which is hard and durable, and a good deal used in house-building. It was introduced by Professor NORDMANN, in 1845, and has, since that time, been largely planted for ornamental purposes. It is exceedingly beautiful, and makes an admirable object for the lawn. Being somewhat late in putting forth its young shoots in spring, it is, therefore, not so apt to be hurt by the frost as are some of the others. It is very accommodating as to soil, and in its native regions attains to the moderate height of 70 or 80 feet.

The Pansape silver fir (*Picea Pinsapo*) is a well-known and very beautiful species from the higher mountain districts of Spain, where it grows some 60 or 70 feet high. It is a special favourite, makes an admirable lawn ornament, and is said to stand the smoke of a town district better than any of the fir family. It was introduced in 1838.

THE CEDAR OF LEBANON.

For general picturesqueness and grandeur of appearance, as well as for historical interest, no tree of the coniferous family rivals the Cedar of Lebanon. In the maturity of its growth it attains to a height of about 70 or 80 feet, and the branches are wide-spreading in proportion to the height of the tree itself. In a young and sapling state it somewhat resembles the larch, only it is evergreen, and, in general appearance, much more robust. It is a native of Mount Lebanon, as well as other mountains in Asia, and is, more or less, abundantly distributed over a wide range.

The first introduction of this cedar into England is supposed to have been about 200 years ago. There are now several fine specimens to be met with in various parts of the kingdom, equalling, it is said, those to be found on Lebanon at the present time. Indeed, it has also been asserted that there are now probably more cedars within fifty miles of London than even on Mount Lebanon.

Mount Lebanon never seemed to have got over the devastation committed upon it by King SOLOMON and the 80,000 hewers which he employed in procuring wood for the Temple at Jerusalem, and for the construction of his own palace, which was aptly called "The House of the Forest of Lebanon." SOLOMON,

we are told, paid to HIRAM, King of Tyre, 20,000 measures of wheat and 20 measures of pure oil per annum for permission to cut trees necessary for the work. And it is quite likely, too, speaking in a worldly sense, that he endeavoured to make the best of his bargain. Moreover, his mind being taken up with architectural projects, he would have little time, and probably no inclination, just then to consider the sylvan picturesqueness of the old mountain—a mountain the awe-inspiring grandeur and various associations of which were, doubtless, devoutly cherished by the humble people. We can easily imagine, even at this distant date, how greatly their simple conservative prejudices would be shocked by the doings of the “wise king.” After all, and talk as we may, strangely tenacious is that mysterious feeling in man for things old and venerable; and, notwithstanding the alluring fascinations of luxury, the old-world spirit is constantly seeking to work its way back to the lap of simple nature.

The great renown in which the wood of the cedar was held by the ancients has not been altogether supported by modern opinion. It has been found that cedar—English grown cedar at least—is by no means durable, and that it is much given to warp and shrink in seasoning. LOUDON tells us of a table he had made from a slab of English-grown cedar-wood which presented nothing attractive in its appearance,

being similar to deal in veining and smell. A section of the trunk resembles that of silver fir. The cedar has been found to be a tree of very rapid growth, and this has led to a variety of speculations concerning the probable age of the largest trees now on Mount Lebanon. It would appear from some evidence adduced that they are not more than about 350 years or at most 400 years old ; and this is set down as the probable limit of age to which the cedar attains, and not 3,000 years as has been stated. History, poetry, and religion have thrown a mantle of strange fascination over the "Cedars of Lebanon" which, unless for some vital purpose, we should be loth to disturb.

Privileged in boyhood to wander at will through silent glens, moorlands, and pine-woods, and being familiar with each mossy and resinous perfume, I can enter with eager sympathy into HOSEA's reference to the smell of Lebanon, which was doubtless emitted from the "goodly cedar." References to the cedar of Lebanon are very frequent in the sacred Scriptures : "The righteous shall flourish like the palm tree ; he shall grow like a cedar in Lebanon." "Behold the Assyrian was a cedar in Lebanon with fair branches and with a shadowing shroud, and of an high stature, and his top was among the thick boughs. His boughs were multiplied and his branches became long. The fir trees were

not like his boughs, nor the chestnut tree like his branches, nor any tree in the garden of God like unto him in beauty."

There is a night picture in the "Land and the Book," of the old cedar grove with which I am much pleased: "The grey old towers of Lebanon, still as a stone, stand all around, holding up the stars of heaven to look at you; and the trees, gathering like phantoms about you, wink knowingly, or seem to, and whisper among themselves you know not what. You become suspicious, nervous, until, broad awake, you find that it is nothing but the flickering of your drowsy fire, and the feeble flutter of bats among the boughs of the trees."

The trees themselves grow at an elevation of upwards of 6,000 feet above the sea, and are scattered in irregular groups on the sides of the shallow ravines. The space covered by them is said not to exceed half-a-dozen acres; and the number of trees, great and small, is not more than 1,500.



THE DEODAR.

In admirable contrast to the grandly-picturesque character of the cedar of Lebanon, is the peculiar gracefulness of the Indian Cedar, (*Cedrus deodara*.) It is a native of the Northern Himalayas, and is found in extensive forests, in the ravines, at an elevation of from six to 12,000 feet above the sea. It grows to a height of more than 150 feet, and attains about 20 feet in circumference. The wood has an agreeable perfume, is of a yellowish-white colour, compact and very resinous, and is extensively used in building. According to Bishop HEBER, it is regarded among the Hindoos as a sacred tree, and is often met with about their ancient temples. In 1822 it was introduced into this country, where it is found to grow much more rapidly than the cedar of Lebanon, and has also proved itself perfectly hardy.

The Mount Atlas Cedar (*Cedar Atlantica*) is another noble plant from the mountains of Barbary, and grows at about the same altitude as the last. It is described by travellers as an imposing and picturesque tree of about 100 feet in height, having a straight, tapering growth, but without the gracefully pendent habit in the branches so beautifully characteristic of the Indian cedar. The branches of the Mount Atlas cedar are more stiff and spreading, somewhat like unto those of the cedar of Lebanon.

In short, it may be generally described as a form between the robustness of the one and the delicate grace of the other. It has a shining, silvery-looking foliage, and is a pleasing contrast among pines of a darker hue. Introduced in 1845, it was to be found to be quite hardy in our climate. The wood, too, has considerable reputation among coniferous trees.

There are many kinds of wood called cedar which are, strictly speaking, not from cedar trees at all. Of these I shall mention a few.

The Bermudian cedar of commerce is from the tree known as *Juniperus Bermudiana*. It is used in this country for pencil making, and in the Bermudas for building boats and small vessels. It is a very fragrant wood, and reminds one of a passage in the much-admired description of Calypso's Isle, where we are told—

“A fire on all the hearth
Blazed sprightly, and afar diffused the scent
Of smooth-split cedar and of cypress-wood
Odorous.”

The red cedar of the United States is also a juniper (*Juniperus Virginiana*), much admired for fancy cabinet work. It attains to a height of from 40 to 50 feet, with a circumference of four feet near the ground, and has been known in this country for upwards of 200 years.

The Cuba, Honduras, and Mexican cedar of the merchant—all varieties of the same wood—is from a different class of plant altogether. It is known amongst botanists and arboriculturists as *Cedrela odorata*, and has been grown in collections as a stove plant since 1739. As a tree, in its native place, it grows to a considerable size, furnishing logs of timber of from 20 to 40 feet in length, and of from one to two feet square. It belongs to the same natural order of plants that the mahogany tree does. The wood is a good deal used by cabinet-makers, and also, by the way, somewhat extensively for the making of cigar boxes.

The light, fine-grained wood known as American white cedar is from a plant of the cypress family called *Cupressus thyoides* or *Chamæcyparis spherioidea*. It is a native of Canada and the United States, and grows in low, swampy ground to a height of about 70 or 80 feet. It was introduced into this country in 1736, and is frequently met with, but only as a moderate-sized shrub.

The Japan cedar is *Cryptomeria Japonica*, an elegant coniferous tree from Japan and the North of China, where it is found growing from 500 to 1,200 feet above the sea-level. Seeds were first sent home by Mr. R. FORTUNE in 1844, and the plant is now pretty generally distributed. It has short, needle-

like leaves of a bright green colour, covering the shoots very thickly. As a lawn specimen it is specially attractive, but requires a sheltered situation, In its native habitat it reaches a height of from 80 to 100 feet, and the wood is said to be soft and light, being held in high estimation by the Japanese for the finer kinds of cabinet-work.

THE YEW.

The common Yew (*Taxus baccata*) is a native of Britain, and is found growing in various parts of the island, particularly in the natural woods of rocky and mountainous districts. Considered merely in a picturesque light, it holds a respectable position. The stem is usually short and massive, and along with the larger branches often deeply furrowed and irregular. The bark is thin, of a rich, reddish-brown colour, and peels off in patches ; the lower branches spread in an almost horizontal direction, and to a great length, densely shading a large space. As a tree it is rarely found growing in masses together, but frequently alone, or among other trees. On that account it has been called an unsociable tree. Being of comparatively slow growth, the yew is long in reaching maturity, and ages will again elapse before it betrays the ordinary signs of decay. WORDSWORTH

recognises this tenacity of character in his lines on the Lorton Yew—

“This solitary tree, a living thing,
Produced too slowly ever to decay,
Of form and aspect too magnificent
To be destroyed.”

The history of yew trees still in existence can be traced to upwards of a thousand years; and the wood is hard, close-grained, and compact. It is considered the finest European wood for cabinet-making purposes, and is of almost incredible durability. According to GILPIN, it was a common saying among the inhabitants of the New Forest that a post of yew would outlast a post of iron. The same author says that “tables made of yew, when the grain is fine, are much superior to mahogany.” It was of this wood that the old English yeoman made his long bow, and which he boasted nobody but an Englishman could bend. It is a very heavy wood, being, according to LONDON, 80 lbs. 9 oz. per cubic foot when in a green state, and 61 lbs. 7 oz. when dry.

The yew is said to possess deleterious qualities, and there has been a good deal of discussion from time to time on the subject. Sheep and horses have been poisoned by eating the green shoots, while deer will browse on them with impunity. The red, fleshy pulp, which partly covers the seed, I have myself frequently eaten, and found not disagreeable, but was always taught to reject the green or inner portion as

poisonous. SHAKESPEARE calls it the "double fatal yew," doubtless in reference to its poisonous qualities, and its use as a bow. In "Toxophiles," a quaint old book, 1544, by ROGER ASCHAM, there is the following instructions concerning the choice of a bow: "If you come into a shoppe, and fynde a bowe that is small, longe, heavye, stronge, lyinge streighte, not wyndynge, nor marred with knottes, gaule, wyndshake, wem, fret, or pinch, bye that bowe on my warrant."

By a statute made in the fifth year of EDWARD IV., it is set forth that "every Englishman, and Irishman dwelling with Englishmen, should have a bow of his own length made of yew, wych-hazel, ash, or aburne—that is laburnum, which is still called awburne saugh in many parts of Scotland."

The yew was a consecrated tree in olden times, and its value was considerably enhanced in consequence. According to the ancient laws of Wales, "a consecrated yew, its value is a pound; a mistletoe branch, threescore pence; principal branch of an oak, thirty pence; a yew tree (not consecrated) fifteen pence; a sweet apple, threescore pence; a sour apple, thirty pence; a thorn tree, sevenpence-halfpenny; every tree after that, fourpence."

The yew grows to a great size in the English lake district. First there is the pride of Lorton Vale, already mentioned, measuring about 27 feet in cir-

cumference. That of Yewdale, which has a girth of 25 feet at five feet from the ground, some of the local chronologists stoutly maintain to have been a tree at the time of the Flood. Then there is the "fraternal four" of Borrowdale, "joined in one capacious grove," one of which measures seven yards round. They are sublime objects of living antiquity. I shall not soon forget the strange kind of feeling I experienced when I first saw them. It was about four o'clock one glorious August afternoon, after I had been wandering alone for miles over "mountain and moor," that I came rather unexpectedly upon them. I was just sufficiently fatigued to be humble, and to enjoy, with a sober pleasure, the objects around. Indeed, I might have been disposed to call the rudest Druid a brother had I met him in the solemn precincts of those ancient trees. They had been little, tender saplings once, I thought—but when? The storm-fretted mountains only know, and they wisely keep their secret. The streams laughed and gurgled, but all else seemed sad and silent. Wastdale Head must be reached before dark, so I pass on "casting many a lingering look behind," haunted by a sentiment cherished since early boyhood: "Lovely art thou, O peace, and lovely are thy children, and lovely are the prints of thy footsteps in the green valleys."

There are several other celebrated old specimens in various parts of England and Scotland. That of

Darley, near Matlock, is well-known. It grows in the churchyard, and is supposed to be upwards of 600 years old. It measures round the trunk 33 feet. GISBORNE mentions it in his "Reflections"—

"Nor shall thy reverend yew, the sire who holds
His sceptre verdant through the changeful year,
Unnoticed stand."

The Ankerwyke yew is mentioned in connection with HENRY VIII. and ANNE BOLEYN, when the latter resided at Staines—

"There, too, the tyrant HENRY felt love's flame,
And, sighing, breath'd his ANNE BOLEYN's name ;
Beneath the shelter of this yew tree's shade
The royal lover woo'd the ill-starr'd maid."

Inch Lonah, I think they call it, on Loch Lomond, was formerly covered with a little forest of magnificent yew trees, some respectable remnants of which yet exist.

The yew has always been a favourite tree for planting in churchyards, and the most ancient are usually found in such places. GRAY, in his "Elegy," speaks of the

"Yew tree's shade,
Where heaves the turf in many a moulding heap."

And BLAIR calls it a

"Cheerless, unsocial plant that loves to dwell
'Midst skulls and coffins, epitaphs, and worms."

Among the special uses to which the yew was at one time applied, was that of forming those strange vegetable monsters so common, and generally admired, in old gardens and pleasure grounds, and upon which so much skill and labour were regularly wasted. Yew plants were also used for the purpose of making hedges, and those, too, frequently had a row of the fashionable absurdities along the top. When freed from unnatural constraint, the yew is one of the best ornamental shrubs that can be planted. There are five or six species, and several varieties, none of which, however, demand special notice here, except, perhaps, the Irish yew, on account of its fastigiata habit of growth. That it is a variety of *Taxus baccata* is sufficiently proved by the seeds producing plants of that species. These strange freaks of nature are not to be accounted for. The original plant was found in the year 1780, near Benoughlin, and was brought to the gardens at Florence Court by a tenant. It is supposed that from this plant all the so-called Irish yews now in cultivation originated.



THE HORNBEAM.

The Hornbeam (*Caprinus betulus*) is a tree somewhat resembling the beech. It is tolerably common in some parts of England, and, under favourable circumstances, attains to a height of from 50 to 60 feet. It resists the influence of the wind well, and thrives with considerable vigour even in cold, barren, exposed places. A considerable number of hornbeams have been planted by Lord ARMSTRONG at Cragside, and seem to be thriving remarkably well. The tree is said to be averse to a chalky soil, and, in that respect, quite opposite in its nature to that of the beech. As a hedge-plant it is very valuable, stands clipping well, and makes, as EVELYN says, "the noblest and stateliest hedge for long walks in gardens or parks of any tree whatsoever." As a timber it is white, close-grained, tough, and flexible, and used for a variety of purposes where such qualities are required. According to LASLETT, the wood, when subjected to vertical pressure, cannot be completely destroyed. Instead of the fibres breaking off short, they double up like threads, a conclusive proof, he says, of its flexibility and fitness for service in machinery. When in its green state it weighs 64 lbs. per cubic foot, and 51 lbs. when well-seasoned.

Though indisputably a native tree, it is remarkable how little the hornbeam is known. It is a good deal

commoner in the South of England than in the North; and, according to Sir J. SMITH, forms a principal part of the ancient forest on the north and east sides of London. GERARD gives the following quaint account of it: "It grows great," says he, "and very like unto the elme or wich hasell tree, having a great body, the wood or timber whereof is better for arrowes and shafts, pulleys for mils, and such like devices, than elme or wich hasell, for in time it waxeth so hard that the toughness and hardness of it may be rather compared unto horn than unto wood; and, therefore, it was called hornbeam or hardbeam. The leaves of it are like the elme, saving that they be tenderer; among these hang certain tangled things, upon which are found knaps, or little buds of the bigness of eiches [vetches], in which is contained the fruit or seed. The root is strong and thicke."

The hornbeam has considerable reputation as a fuel, burning freely, and emitting a great amount of heat. It also makes an excellent quality of charcoal fit for making gunpowder.



THE ELDER.

The common Elder (*Sambucus nigra*) is remarkable for the rapidity with which it grows when young, and the extraordinary amount of pith the shoots then contain. The branches do not grow so fast after the first year, and the pith becomes more compressed by the formation of new wood. Every youth knows the use of the elder in making pop-guns ; and, in ancient times, flutes, pipes, and other simple musical instruments were made from it. The generic name, *sambucus*, is said to be derived from *sambuca*, a kind of musical instrument, which is supposed to have been made of elder wood. It is seldom, as a tree, that it attains to a greater height than 20 or 30 feet ; and, when covered with its large cymes of white flowers, has a very striking appearance. The leaves, which have a strong, peculiar smell, said to be unwholesome, are pinnate, and the leaflets slightly notched.

The elder has been found very useful for planting about towns, as it can be got to grow in places where almost every other kind of tree would fail. It is also very valuable to plant as a shelter to young plantations and gardens in exposed places near the sea. When the plantations about Cresswell were being formed, it was used extensively for that purpose ; and, not unfrequently there, too, the beautifully suggestive picture of Sir THOMAS DICK

LAUDER is realised of the "elder shooting from the wild fence of the village garden, white with flowers or purple with berries."

The wood of the elder is looked upon as singularly reliable for stakes in making what is called a dead hedge. To this the following couplet testifies :—

" An elder stake and yew heather
Will make a hedge to last for ever."

Probably some will think this needs a little prose corroboration ; but no matter. The word heather, it will be observed, is a synonym to our Border word yeather, which is a name given to the long, slender rods plaited about the tops of the stakes in order to hold them firm in their places, and to keep down the thorns or other bushes the fence happens to be composed of. Both heather and yeather are, probably, corruptions of header, as applied in the sense of a finishing or top piece to this kind of fence. Elder wood is specially well adapted for the making of skewers, and butchers prefer it to any other for that purpose.

Old writers attribute a long list of medicinal virtues to the elder ; the wood, bark, pith, flowers, and fruit all coming in for a particular share. In modern days, elder-berry wine and elder-flower tea are well known. The bark of the young, sappy shoots is reckoned good for scalds and burns, but its fame is by no means so great as it used to be. EVELYN

records that an extract may be composed of the berries which is not only greatly efficacious to assist longevity, but is a kind of catholicon against all infirmities whatsoever. WILLIAM BORLASE, an ingenious antiquary of the last age, tells us "there is a spirit to be drawn from the elder which a certain Duke of Somerset, who married the heiress of Piercy, took for the gout." It is also said that BOERHAAVE, the great physician, had such a reverent regard for the medicinal virtues of the elder, that he sometimes took off his hat on passing the tree as a recognition due to its merit. But, in opposition to this, there is a kind of grim suggestiveness about the tradition of its being the kind of tree on which JUDAS ISCARIOT hanged himself.

In the North of England, and in Scotland, the elder is called bore-tree or boortrie. BURNS mentions it under the latter name in his "Address to the Di'el :—

"Or rustlin' thro' the boortries comin'
Wi' heavy groan !"

In certain parts of Scotland it is called arn-tree ; and is also supposed to be the borral tree mentioned in the "Brownie of Bodsbeck," where NANNY shows her perfect contempt for the "spirits" in the following lines :—

"Little misters it to me
Whar they gang or whar they ride,

Round the hillock on the lea,
Round the auld borral tree,
Or bowrock by the burn side ;
Deep within the bogle-howe,
Wi' his haffats in a lowe,
Wons the waefu' wirricowe."

THE LABURNUM.

The common Laburnum (*Cytisus laburnum*) is a well-known and much-admired tree. It is a native of Switzerland, and is supposed to have been introduced into this country nearly 300 years ago. When in full and perfect flower, or "rich in streaming gold," as COWPER poetically describes it, few trees are its rival in a wealth of striking beauty. It grows in almost any kind of soil, but prefers and attains to the highest degree of perfection in a rich, sandy loam. It is a tree that stands the smoke of towns well, and is also well adapted for planting in small plots of ground where large trees are not admissible. Pushing out but few horizontal roots, and having a somewhat wide-spreading head, the laburnum is apt to get blown aside by the storm. On that account, perfectly well-balanced trees are not often met with. The manner of growth is also somewhat irregular, and old trees have frequently a very picturesque appearance. Nothing can have a finer effect than a laburnum, in full bloom, drooping over a fence, or by

the side of a gateway, about pleasure walks, or here and there, with its bright, golden tassels, ornamenting the skirts of a dark plantation. Even in the early spring-time, the soft, silver-looking buds which enclose the smooth, shining foliage, and beautifully pea-shaped blossoms are very attractive. In favourable localities, the laburnum will reach a height of from 20 to 30 feet, and when of corresponding breadth and "drooping wells of fire," as the Laureate rather oddly puts it, is truly a gorgeous object :

" I know a sweet coppice or two
Where the clust'ring laburnum grows."

The wood is of a very hard, compact nature, and where small pieces are required with such qualities, few kinds are superior. It is prized by turners and cabinet-makers, chairs made from it being considered stronger than those of any mahogany. Having a kind of unctuous nature, which prevents it from being abraded, it is, therefore, suitable for wedges, pullies, pegs, casters, and the like. It is also used for knife and tool handles, and for flutes, and other instruments of music. In the North of Scotland it is used alternately with the holly and spindle-tree in making staves for noggins or bickers, and other small, fancy articles. When thoroughly seasoned the wood weighs about 52 lbs. 11 oz. the cubic foot. Many of the uses to which laburnum wood was formerly applied

have been superseded by *lignum vitæ*, which is also an unctuous and harder wood, though rather more apt to splinter. Neither laburnum nor *lignum vitæ* hold glue well, owing to their oily nature.

There is a species known as *Cytisus alpinus*, which some state to be a native of Scotland, and is commonly called Scotch Laburnum. Others, again, say both species were introduced about the same time, viz., 1596. Mention is made of it in a statute of EDWARD IV., under the name of "awburne," and in some parts of Scotland laburnum is still called "awburne saugh" or awburne willow. If the above statement be true, the *Cytisus alpinus* must have been in Scotland at least upwards of 400 years, instead of 290 odd, as would be the case if it had been introduced in 1596.

There are about 40 species of the *Cytisus* family, which contain among them some of the most beautiful flowering shrubs, and it is admirably represented by our common native broom (*Cytisus scoparius*), which, in some of our botanical nomenclature, is called *Sarothamnus scorparius*. To ourselves, the broom has many sweet associations. I have often admired it drooping its golden sprays over the plashing linn, or by the side of the quiet pool, with the fragrant mountain fern, the rock-rose, and the wild brier for its chief companions; aye, and in such places I have watched the rosy-speckled

trouts, in the pellucid pool, darting from sunshine to shade, and from shade to sunshine, with evident satisfaction and glee. MARY HOWITT sings—

“The broom, the bonny, bouny, broom,
It minds me of my native hills,
Clad in heath and fern,
Of the green strath and flowery brae;
The glen and rocky burn.”

Though the broom helps to imparate the memory of many a happy place, I do not forget that it may have more substantial uses. When the Scotch snuff boxes, for instance, were first made by one, Mr. STEVEN, of Laurencekirk, broom roots, which had for a long time been steeped in water, were the materials used; but, as the demand increased, an inferior article was substituted, and, consequently, the true value of the boxes was deteriorated. Broom, in primitive times, was occasionally used for thatching, and for besoms or brooms, as the name indicates. It has also many medicinal properties attributed to it; and the young shoots were formerly used as a substitute for hops in brewing beer. I have, too, frequently known shepherds on the Borders steep the small, tender twigs in order to make an additional ingredient for their sheep-bathing liquid, when that operation was practised. Its use, however, was not general, though I have a very vivid recollection of an enormous iron “kale pot,” belonging to the queer

laboratory of one particular farm, in which it was annually immersed.

In referring again to the laburnum, it might be well to mention that the seeds are poisonous, and that several accidents have resulted to children who have eaten them. Nurses and others who may have the care of children would act prudently, therefore, by not letting them have the pods to play with.

THE HAZEL.

The common Hazel (*Corylus avellanda*), though properly a deciduous shrub, sometimes assumes the character of a small tree. It is common as an undergrowth in old oak woods, and is often found tufting and fringing wild, rocky ravines in hilly districts. In such situations, and under favourable circumstances, it very frequently displays picturesque qualities singularly attractive.

“ Whiles ow'r a linn the burnie plays,
As through the glen it wimpled ;
Whiles round a rocky scar it strays,
Whiles in a wiel it dimpled ;
Whiles glittering to the nightly rays,
Wi' bickering, dancing dazzle ;
Whiles cookit underneath the braes,
Below the spreading hazel.”

The wood of the hazel is close and even grained, and the beautiful veined roots were at one time used

for cabinet work. In various stages of growth, it is used for making crates, hoops, basket ribs, stone-hammer shanks, and for similar minor purposes. When roof-thatching was recognised as a veritable profession, hazel rods were in much demand for what were known as "scobs" or "scowbs." The branches were also used for wattling, and those who are familiar with the vernacular of Border husbandry will know the "scowb" as a "yeather." Thin bands, or ligatures, called "wapps," used for tying besoms, are sometimes made of hazel, but are not considered so good as those of ash.

From time immemorial hazel has furnished the shepherd with his favourite staff. It is as characteristic in his hand as the sapling of the ash is in the hand of the cattle-drover. Whether this partiality to the hazel arises from the fact of its having been formerly used as a divining-rod, it would be difficult to say. Probably, however, it got this singular reputation from the native sagacity of the shepherds themselves. The shepherd often dresses his staff with considerable taste, and it is no mean compliment about the Cheviots to be reckoned a "guid han' wea stick." A true border shepherd has always a number of common work-a-day hazels by him, along with a smart one or two for Sabbath days and other special occasions. It sometimes happens, too, that a speci-

men possessing some notable qualities is handed down from father to son for generations.

During recent years, there has been quite a rage for hazel walking-sticks and collie dogs. Such a fashion has, no doubt, been brought about by excursionists who have formed rather romantic ideas of a shepherd's life, and have thus, in certain respects, emulated those peaceful followers of ABEL, who are supposed to be perpetually basking on sunny hill-sides, or sitting by crystal streams, among golden broom, tending their milk-white flock, and piping to the dancing of some rosy-cheeked PEGGY, the pride of the glen—PEGGY, with raven-glossy hair, bright sparkling eyes, graceful mien, sweet lilting accents, and footsteps so gentle that "e'en the slight hairbell raised its head elastic from her airy tread." This is all very well in fancy. It is quite another thing in reality. Not by any means is a shepherd's life all "sunshine and song," and certainly it is the reverse of indolence.

A shepherd's hazel is quite a different looking article to that usually seen dangling from dainty fingers as a personal adornment. It must be of sufficient length and strength to aid in ascending and descending steep places. It must have an ample curved head sufficient to hold a sheep by the neck, and, at times, to act as a kind of tiller to direct its path. Owing to sundry vicissitudes it becomes, in

time, frayed at the end, but acquires a compensating quality in being specially useful for picking up bits of wool as the shepherd whistles along, and which he thriftily conveys to his pocket.

Along with the cane and the birch, hazel has acquired considerable reputation as an instrument of chastisement, and "hazeling" is a participle distinctly remembered. There used also to be a kind of mythical unction called the "oil of hazel" for juvenile backs, kept by certain grandmothers of the village, and which, too, was sometimes administered in an unexpected form. The term "hazel," by the way, seems to have couched under it an idea of smart, orderly discipline, different to that of "cudgel," which is rather indicative of brutality. It is quite likely that hazeling had its origin in our pious shepherd forefathers faithfully carrying out the precept of SOLOMON regarding the use of the rod. Birching and caning, strapping and belting, are comparatively modern appliances, while hazeling, on the contrary, is probably as old as the days of ABRAHAM.

Chief among the sunny recollections of rural boyhood is, perhaps, that of nut-gathering. Do not I myself remember many a secluded, bosky glen, the joy of early days, away where scarce a sound was heard but the wild melodies of the mountain stream, whither I ran with nimble steps,

"Plucking the ripening nut with eager glee
Which from the hazel bough hung temptingly?"

I have already referred to the use of the hazel as a divining-rod, and some account of this instrument may be of interest to the curious. A divining-rod, as far as I am able to understand, was simply a forked hazel twig, cut off at about three inches or so below the fork. The branches are left at a little over a foot in length, and were cleared of leaves. The operator grasped a branch of the instrument in each hand, having his thumbs pointed outwards, and his elbows clapped close to his sides. The end, or butt, of the rod was kept straight before him in a horizontal position. Thus armed, the operator paced over the ground to be examined, and the presence of any veins of metal, hidden treasure, or springs of water underneath, was indicated by certain depressions of the rod, which only the initiated could understand. It is supposed that only about one in forty are capable of interpreting by this means. With EVELYN, one is inclined to believe that "notwithstanding the attestation of magistrates, and divers other learned and credible persons, who have critically examined matters of fact, it is certainly next to a miracle, and requires a strong faith."

The following exploit is from the autobiography of WILLIAM LILLY, the famous astrologer, and relates to the subject: "DAVID RAMSEY, His Majesty's Clockmaker, has been informed that there was a great quantity of treasure buried in the cloister of Westminster Abbey; he acquaints Dean WILLIAMS

therewith, who was also then Bishop of Lincoln ; the Dean gave him liberty to search after it, with this proviso, that if any was discovered, the Church should have a share of it. DAVY RAMSEY finds out one, JOHN SCOTT, who pretends the use of the Mosaical rods, to assist him herein. I was desired to join with him, into which I consented. One winter's night, DAVY RAMSEY, with several gentlemen, myself, and SCOTT, entered the cloisters : we played the hazel-rod round about the cloister ; upon the west side of the cloisters, the rods turned one over another, an argument that the treasure was there. The labourers digged at least six feet deep, then we met with a coffin ; but, in regard it was not heavy, we did not open, which we afterwards much repented. From the cloisters we went into the Abbey Church, where, upon a sudden (there being no wind when we began), so fierce, so high, so blustering and loud a wind did rise, that we verily believed the west end of the church would have fallen upon us ; our rods would not move at all, the candles and torches, all but one, were extinguished, or burned very dimly. JOHN SCOTT, my partner, was amazed, looked pale, knew not what to think or do, until I gave directions, and commanded to dismiss the demons, which, when done, all was quiet again, and each man returned to his lodgings late, about twelve o'clock at night. I could never since be induced to join with any in such-like actions."

THE IVY.

The common Ivy (*Hedera helix*) is a plant universally admired on account both of its intrinsic merit and its many picturesque and pleasing associations. As everybody knows, it is a climbing evergreen shrub, frequently found in a wild state on hedgerow banks and about rocky places, as well as often mantling the large trees in many of our old woods and forests, lending, as it were, its own peculiar gracefulness in return for the rugged strength that supports it.

In Greek and Roman mythology the ivy holds a prominent place, and was used as an emblem of distinction. The highest prize which the ancients gave to a successful poet was an ivy crown. Amongst the moderns it is yet regarded as a symbol of constancy, more especially by the *juvenalia*, when delicacy of sentiment requires a corresponding delicacy of expression.

As a pleasing adjunct to many a romantic abbey and castle ruin, the ivy holds a distinguished place, creeping stealthily up some obscure corner until it reaches a considerable height, then bursting boldly forth in green, cloud-like masses. In such situations it produces flowers and fruit in abundance, and, not unfrequently, its gloomy recesses are a silent lodging-place to the "moping owl."

The habit of the ivy varies considerably during the different periods of its growth. When young the shoots are brittle, the leaves three or five lobed, and of a lightish-green colour, with white ribs. As the plant gets older the stem assumes a tougher and more woody character, and the lobes of the leaves become wider. After having exhausted its climbing proclivities, it becomes a dense bush, with the leaves entire, and of an oblong shape. The top shoots or branches are propagated, and furnish what is known as the "tree-ivy." In this form it is a nice, compact shrub, useful for town purposes. It is remarkable how very seldom tree-ivy, as it is called, shows any disposition to return to its former climbing habit—a strange piece of vegetable physiology which, when looked at, tells us pretty plainly how short-sighted we are. Those propagated plants will patiently submit to the almost new nature that art has given them, but seedlings will start away with all the old rambling propensity of their progenitors.

There does not appear to be any particular limit as to the height to which the common ivy will grow. So long as it has a suitable support, it seldom, if ever, attempts to produce an arborescent head, and it is only after vainly groping about in space for something to rest upon that it assumes the tree-like character. At such a stage the plant begins to flower and bring forth fruit. The flowers, which are of a

greenish-yellow, make their appearance about the month of October or November, and the fruit, which is black, appears towards April following. The fruit of the ivy is eaten by birds of various kinds.

There has been a good deal of discussion from time to time as to whether ivy grown against a house injures the walls, or causes them to be damp. If the wall itself is a good one, and the ivy properly looked after, my opinion is that it does not, but has quite a contrary effect. I have frequently noticed that, when a wall had been stripped of its ivy, the portion which had been covered was in much better condition than the part that had been exposed to the weather. As to damp being caused to houses by ivy, I think it is often due to not keeping the plants properly trimmed, and by allowing them to wreath about the spouts and gutters, thereby causing obstruction, so that the water overflows and runs down the wall, causing damp to strike through. This, however, is an exception, and I am inclined to think ivy against a house has a tendency to keep the walls dry, and the house itself warm. The leaves shoot off the rain, and the numerous stem-roots by which the plant clings suck the moisture.

Much has also been said about the growth of ivy upon trees. I am myself decidedly of opinion that it is injurious even to large trees. I should not, however, be altogether unwilling, here and there, to

sacrifice a little of the utilitarian principle for the sake of picturesque effect, especially where trees were numerous and had attained to nearly their full growth. The cultivator of timber, it is true, must necessarily be an enemy to ivy on account of the certain mischief it will do to his young plants. Indeed, ivy has little to recommend it but its beauty, which, by the way, is a quality too often sacrificed to a narrow, perverted taste, if not a perverted judgment. Although the growth of ivy upon trees is always interesting to a real lover of "forest scenery," it is doubtful whether, when in large masses, it is much appreciated by painters, especially landscape painters. As a rule, it is much too dense, or what they call "lumpy." It is, however, particularly beautiful in spray, and is often so represented in works of art, with tasteful effect.

Nowhere does ivy look more interesting than when creeping up a house wall. It seems able to adapt itself with equal propriety and grace to any condition of life. The statliest mansion and the humblest cottage are alike adorned by its presence. It is a plant that clings very closely to its support, and amply repays any extra care that is bestowed upon it. It stands the smoke and dust of towns wonderfully well, and is, indeed, one of the best plants for relieving the cold and comfortless appearance of a large monotonous surface of brick or stone. A

town-house adorned with well-kept ivy is like an oasis in a desert. It helps to keep alive rural ideas, and to cherish in the hearts of a pent-up urban population a love for nature, which in itself is a very desirable object.

Ivy will grow almost anywhere, in any kind of soil or situation, but best where it is somewhat cool and a little shady. There are a great many varieties now in cultivation well adapted to different kinds of ornamental work. Indeed, there is scarcely any kind of hardy evergreen which a town cultivator could with more safety adopt as a special study. The several kinds can be grown successfully in pots, and are of admirable use in what is known as "window gardening." One gentleman whom I know considers the prospect across his back yard rendered cheerful by a luxuriant wall of "ivy green."

"Oh, a dainty plant is the ivy green,
That creepeth o'er ruins old !
Of right choice foods are his meals, I ween,
In his cell so lone and cold.
The wall must be crumbled, the stone decayed,
To pleasure his dainty whim ;
And the mouldering dust that years have made
Is a merry meal for him.
Creeping where no life is seen,
A rare old plant is the ivy green."

This is the ivy in its most picturesque aspect. As an accompaniment to some ruined fortress, with its

weird associations, it sometimes has a powerful effect on the imagination. I have here specially in view the ruins of Dunolly Castle, in a situation "wildly beautiful," overhanging the Bay of Oban.

The ivy, however, has its comforting and spirit-cheering aspect; and some may be able to realise the picture of the snug little "cot-house," where

"Up the gavel end thick spreading
Crap the clasping ivy green;
Back owre firs, the high crags cleading,
Raised a' round a cosy screen."

Those who are interested in such things may see a good example of ivy painting in Mr. RALPH HEDLEY's picture of "The Laird and the Gaberlunzie," now* in the Bewick Club Exhibition, in Newcastle.

THE HOLLY.

"Hast thou ever stood to see
The holly tree!
The eye that contemplates it well perceives
Its glossy leaves,
Ordered by an Intelligence so wise
As might confound an atheist's sophistries."

This much-admired plant is botanically known as *Ilex aquifolia*. Though generally regarded merely as an evergreen shrub, it frequently attains to tree-like dimensions. Whether in the form of a tree or

a shrub, it is, indeed, one of the most ornamental evergreens we possess. Its dark, shining leaves and clear, red berries contrast, and combine to make an object most pleasing and gratifying to lovers of sylvan beauty. It is, without doubt, a native of Britain, and is very frequently to be met with in old natural woods, where it never fails to lend additional life and interest to the scene. It is particularly attractive in the winter season, when found growing among the old oaks, the hazel bushes, the moss, the grey crags, and the russet brackens of a moorland glen. I have frequently been delighted with it under such unique circumstances.

The holly, in addition to its value as an ornamental tree or shrub, also makes a very excellent hedge plant. It bears clipping well, and is capable of being trained to a greater height than any other kind of hedge. If properly cared for, it will last a considerable time. As a wood, it is hard, white, close-grained, and takes a high polish. It is applied to a great many uses in cabinet-making and turnery. Being a wood that is easily stained various colours, it is on this account much prized for veneering and inlaying purposes. Sometimes it is used for wood engraving, and is reckoned next in quality to box-wood for that particular art. The bark is manufactured into bird-lime by a process of boiling and evaporation.

The holly thrives best in a rich sandy or gravelly loam that is not too wet, and in such favourable places it sometimes attains to a considerable size. It is a most beautiful object at all times, but more especially when laden with its coral-red berries. There are several species and a great many varieties, some of which are most beautifully variegated. In short, the family contains some of the finest and most beautiful shrubs known. The evenly-tapered shoots make good whip handles, and are also in request for fancy walking-sticks.

As might reasonably be expected, the holly has always been a favourite with the poets. Readers of WORDSWORTH will remember the "one fair plant, a tall and shining holly." And perhaps some may picture Coila's "ain" inspired rustic bard, sitting disconsolate in his old, smoky, clay-built cot—he whom a goddess herself came to cheer, to comfort, and to counsel, and finally to crown with the garland of gracefully-twisted holly from her own sunny brow, a vision dear to the poet's heart, and a solace to his troubled mind :—

“And wear thou this—she solemn said,
And bound the holly round my head ;
The polished leaves and berries red
Did rustling play,
And, like a passing thought, she fled
In light away.”

An interesting allusion is made to the above circumstance by the kindred-spirited and genial OLIVER WENDELL HOLMES, in the following lines:—

“ Brave singer of the coming time,
Sweet minstrel of the joyous present,
Crowned with the noblest wreath of rhyme,
The holly leaf of Ayrshire’s peasant.
Good-bye ! Good-bye !—Our hearts and hands,
Our lips in honest Saxon phrases,
Cry, God be with him, till he stands
His feet among the English daisies ! ”

THE BOX-TREE.

It is not by any means a point definitely settled that the common Box-tree (*Buxus sempervirens*) is really a native of British soil. GERARD, who wrote during the reign of Queen ELIZABETH, tells us that “it groweth upon sundry waste and barren hills in England.” And EVELYN states also : “These trees rise naturally at Boxley, in Kent, and in the county of Surrey.” Box Hill is apparently the only place where they are known to have grown, in any quantity, in a wild or seemingly wild state. GILPIN evidently considered the tree a native ; for in speaking of Box Hill he says : “The plant grows here in full luxuriance, in its native uncultivated state, marking the road on the right with great beauty.”

It is a slow-growing evergreen, reaching in England to the height of 12 or 15 feet ; but in Turkey and Asia Minor it grows much larger. The wood is very valuable, and always in considerable demand. The trees on Box Hill, so much admired by GILPIN, and which were cut down in 1815, realised upwards of £10,000. When newly cut the wood weighs 80 lbs. 7 oz. per cubic foot, and 68 lbs. 12 oz. when quite dry. It possesses a rare combination of unique qualities ; is hard, close-grained, cuts easily to a fine edge, and is, therefore, the very best wood for engraving. In this capacity it is remarkably durable. It is stated : " Many of BEWICK's blocks have printed upwards of 300,000 ; the head-piece of the *Newcastle Courant* above 1,000,000 ; and a small vignette for a capital letter in the *Newcastle Chronicle*, during a period of 20 years, at least 2,000,000." Besides being extensively used for engraving, the wood is made into measuring rods, various kinds of graduated scales, weavers' shuttles, tool handles, dressing sticks for shoemakers, and also croquet balls and croquet mallets for the lovers of that gentle pastime. Combs were formerly made of boxwood, it would seem, for the poet of a long past day tells us—

" Box combs bear no small part
In the militia of the female art ;
They tie the links which hold our gallants fast,
And spread the nets to which fond lovers haste."

In France, Germany, and Switzerland, the root is manufactured into snuff boxes and various other fancy articles. It is an interesting and useful ever-green shrub when left to its own natural habit of growth. Formerly the plant used to be coerced into various strange shapes inconsistent with the pure principles of taste. Fashions have changed ; these vegetable laws have been repealed, and a box-tree is now at liberty to assert its own beautiful individuality.

According to Dr. LINDLEY's "Vegetable Kingdom," the common box-tree has a bark with qualities similar to those of the guaiacum (that is, the *lignum vitæ* tree), for which it has been substituted. The leaves are bitter and very purgative ; nevertheless, it is alleged that they have been used as a substitute for hops. It is also said that "in some parts of Persia, where box-trees abound, camels cannot be employed, because it is found impracticable to prevent their browsing the leaves, which kill them."

Buxus balarica is a species of a much larger growth than the one just mentioned. The tree itself grows to a height of 70 or 80 feet, and the leaves are about three times the size of those of *Buxus sempervirens*. It is found in Minorca, Sardinia, Corsica, and Turkey, and was introduced into this country in 1780, where it is grown as an ornamental shrub. The wood, which is of a yellow colour, is said to be of an

excellent quality, though somewhat coarser-grained than the common box. Quantities of it are imported from Constantinople and other places. It comes in round logs or billets varying in length from 3 to 8 feet, by 3 to 12 inches in diameter, and is sold by weight. It is not so good for engraving purposes as the common box.

THE STRAWBERRY-TREE.

The Strawberry-tree (*Arbutus unedo*) is a most beautiful evergreen shrub or low tree. It is a native of the South of Europe and Palestine, and is claimed by most authorities as a native of Ireland, in consequence of its growing abundantly about the Lakes of Killarney. Whether it is really indigenous to that locality, or has been introduced at some remote period, as some assert, will always remain an open question. Mrs. S. C. HALL, in her book on "Ireland: Its Scenery, &c.," says: "The tourist on approaching the Lakes of Killarney is at once struck with the peculiarity and variety of foliage in the woods that clothe the hills by which on all sides they are surrounded. The effect produced is novel, striking, and beautiful; and is caused by the abundant mixture of the tree-shrub *Arbutus unedo* with the forest trees."

The leaves are dark green, smooth, oblong-lanceolate, and serrated at the edges. The flowers are in clusters, hanging downwards, and of a faint, yellowish-colour, globular in shape, and rather transparent. Miss TWAMLEY describes them most beautifully as—

“Small bell-shaped flowers, each of an orient pearl,
Most delicately modelled, and just tinged
With faintest yellow, as if, lit within,
There hung a fairy torch in each lamp-flower.”

These flowers are produced in September and October. The fruit, which succeeds the flowers of the previous season, begins also to ripen about that time ; for it is a peculiarity of the plant to bear both fruit and flowers at the same time, the fruit taking the entire year to perfect itself. When quite ripe it has a striking resemblance to a small strawberry, and, in company with the waxy-looking flowers that adorn the plant, has a very attractive appearance. The fruit itself is rather of a mealy consistency when ripe, and not very tempting to the second taste.

The explanation given of the specific name *unedo* is something to the effect that nobody who eats one berry will wish to eat another. We are told, however, that the fruit is exposed for sale in the market at Smyrna and Padua. Sir JAMES SMITH informs us also that in the Levant it is agreeable and wholesome. It is said that sugar and a very good spirit

can be extracted from the fruit, and that the leaves may be used with advantage in tanning.

Though the general aspect of the *Arbutus unedo* is more that of a huge bush than a tree, it can be made to assume that character. EVELYN says that "if skilfully pruned, it grows to a goodly tree, patient in our clime, unless the winter be severe." It is a common plant in shrubberies, particularly in the south ; and we are told it flourishes among the rocky cliffs on Mount Edgecumbe in Devonshire. It grows well at Cresswell, and I never noticed it at all injured by frost there. The situation, however, is near to the sea. The plant loves pure air and freedom, and is very impatient if crowded or overhung by other trees. The wood is of little consequence, but about Killarney it is made into boxes and other fancy articles, which are sold to visitors.

There are upwards of a dozen species, some of which are very handsome. *Arbutus Andrachne*, from the Levant, 1724, is a fine species. So is also *Arbutus procera*, from North America, 1825. It grows very rapidly, and is considered somewhat more hardy than the common sort. They all succeed well in good, loamy soil.



THE SPINDLE-TREE.

The European Spindle-tree (*Euonymus Europæus*) ought rather, perhaps, to be considered as a shrub than a tree. In its wild and unimproved state it seldom attains in height to more than from 6 to 12 feet, and is generally of a straggling habit of growth. When cultivated, however, it will sometimes reach to a height of 30 feet. The small branches and twigs are remarkably green; the leaves narrow, smooth, and finely serrated. Flowers of a greenish-white make their appearance about the month of May or June, and are succeeded by an abundance of scarlet-coloured fruit, which gives to the whole plant a singularly attractive appearance. The leaves and bark are both of an acrid and poisonous nature; and have a fetid, disagreeable smell when bruised. The leaves themselves, dried and reduced to powder, have been used to put on the heads of children to drive away lice; hence the tree is sometimes called Louse Wood.

The wood is hard, tough, and fine-grained, and has been a good deal used for making spindles, particularly in Germany. It is also employed in Scotland, as has been before mentioned, along with the wood of the laburnum and holly, in making staves for nuggins or bickers. Watchmakers also

use it, and prefer it to any other kind of wood, for the slender spills which they employ in cleaning watches. It is known amongst them as "peg-wood," and is imported in small, pencil-like pieces of about six or seven inches long, tied into little faggots with wire. My friend, Mr. YOUNG, watchmaker, in the Bigg Market, tells me that hazel was formerly used, but that it is not nearly so reliable as "peg-wood," when reduced to the fineness of point necessary for so delicate a purpose.

There are upwards of a dozen species of *Euonymus* in cultivation. That known as *latifolia* is, perhaps, one of the handsomest. It grows to a height of from 12 to 15 feet, and has broad shining leaves and very ornamental, pendulous, dark-red fruit. When the capsules open, the seeds, which are of an orange colour, become suspended from the cells in a very conspicuous manner. The plant is a native of Germany, France, and Switzerland, and was introduced into this country in 1730. *Euonymus Japonica*, introduced in 1804, is another very attractive and valuable species. It is a good deal cultivated, and in Japan it grows to about 20 feet high. There are several well-marked variegated forms of both this and the preceding, which, in addition to being useful for the shrubbery outside, are also cultivated in pots for greenhouse, conservatory, and window decoration.

In window-cases we often see the *Euonymus* fresh and thriving when the other plants contemporary with it have a very dejected and woebegone aspect.

THE PRIVET.

The common Privet (*Ligustrum vulgare*) is a most useful, hardy, sub-evergreen shrub. It is a native, found chiefly in thickets in the South of England, and has been extensively cultivated almost everywhere. It is of a nature well adapted for planting in masses in plantations and shrubberies, and also makes an excellent hedge plant, particularly when mixed with hawthorn. Indeed, I have seen admirable hedges composed of hawthorn, beech, and privet, with here and there a holly. Few plants of so dissimilar a nature are more friendly in close combination, or produce a happier or more useful result. It must be borne in mind, however, that such hedges are principally adapted to dressed grounds. The privet is a useful town shrub; it stands the smoke well, and grows freely in almost any situation.

There are three or four species, and about as many varieties. The species known as the oval-leaved privet (*Ligustrum ovalifolium*), is now, perhaps, the most extensively planted. It is a strong grower, keeps its foliage well, and, when planted out singly,

where it has plenty of room, soon forms a large and dense bush. The privet is additionally conspicuous when in flower, as the blossoms are white, produced in clusters at the ends of the twigs, and have a sweet, though rather sickly smell. The berries are round and black, and we are told a kind of mild oil is sometimes extracted from them which may be used for culinary purposes as well as for lamps. The straight, clean shoots are used for basket making, and for tying purposes—the generic name being from *ligo*, to bend or tie.

Those who wish to cultivate ornamental hedges of privet would do well to confine themselves entirely to the oval-leaved sort. It is much more robust than the common privet, and stands clipping equally well. Frequent examples of its use in this way are to be met with about the “canny toon,” which should be sufficient guarantee that it will thrive anywhere else.

The plant known as the Egyptian privet (*Lamsonia inermis*) is quite a different kind of thing. It is a shrub belonging to the natural order *Lythracea*, which yields, from the bruised leaves, a rich colouring matter, used by the damsels of Egypt, and elsewhere, to stain their hands and feet. It is called *henna*, and, besides being an essential in the toilet of the African beauty to give a finishing touch to her native attractions, it is used to impart a reddish

or orange-brown colour to ordinary dress stuffs. When Sir WILLIAM JONES was in the island of Hensuin, he had his nails stained with the preparation, and found the colour very durable. How strangely paradoxical are the ideas of beautifying !

THE WOODBINE.

The common Woodbine (*Lonicera Periclymenum*) makes no pretension whatever to the character of a tree. It is, as most people know, merely a twining, deciduous shrub, but often so intimately associated with the peculiar loveliness of romantic forest scenes as to render it deserving of special attention. It is a native of Britain, frequenting hedges and thickets. It climbs to a height sometimes of 15 to 30 feet, and always twines from east to west. The leaves are of an oval-shape, glaucous on the under surface, and commonly rather downy. The flowers, which make their appearance usually in June and July, are in bunches, trumpet-shaped, and of an orange colour, and particularly fragrant. They contain a considerable quantity of honey, and are a great attraction to bees and other insects of various sorts.

The berries are a deep red when quite ripe, of a globular form, and have a somewhat sweet, but mawkish taste. Not unfrequently it happens the

plant has a second flowering season about the month of October, so that ripe fruit and flowers are often met with at the same time.

The woodbine is an attractive feature to the rustic arbour ; and few, if any, other plants lend such sweet picturesqueness of appearance to the rural cottage, with its garden of bee-hives and old-fashioned flowers—the flowers crowding each other, as it were, for very love, and breathing a fragrance ever memorable. I myself particularly cherish the remembrance of one lovely, snug, blue-slatted, two-roomed cottage, with its mullioned windows and lozenge-shaped panes, almost buried during the summer season in a profusion of woodbine, jasmine, and roses. There are many such, but this one had a special attraction from the fact of its being the spot we first designated “a home of our own.” Surely those dry-bone philosophers who tell us there is no inherent beauty in objects, never lived, newly-married, in a “woodbine cottage”—

“Brought from the woodlands, the honeysuckle twines
Around the porch, and seems in that trim place
A plant no longer wild.”

In the glades of natural woods the honeysuckle or woodbine, as we prefer to call it—

“Loves to hang on barren boughs remote
Her wreaths of flowery perfume.”

Under such conditions it is sometimes very beautiful, having a freedom and easiness of grace peculiar to itself. It must be owned, however, on the other hand, that young and growing trees are apt to be injured by the strictness with which the woodbine clasps their stems, and those spiral indentations we occasionally see in fancy walking-sticks are not unfrequently due to that cause, though it is often brought about by other means.

In my early school-boy days, I remember, the plant was called "smoking-wood," from the circumstance of the dried hollow shoots being smoked like a cigarette. By this means we, younglings, were enabled, in a cheap kind of way to imitate, approximately at least, the "children of a larger growth." Sometimes, too, unforeseen contingencies enabled the domine (who was a kind of custom-house officer in such matters) to make a raid upon our slender stock, which was always ruthlessly confiscated, and an adequate penalty imposed. Grievous as were those seizures to us at the time, it is some satisfaction now when we think that, although our smuggling peccadilloes led us sometimes to disturb the squire's pheasants, it in no way defrauded the revenue.

The Egplantine of MILTON is evidently none other than the woodbine, as appears in those well-known lines in "L'Allegro"—

"Then to come in spite of sorrow,
And at my window bid good-morrow,
Through the sweet-briar, or the vine,
Or the twisted eglantine."

This, however, is a mistake on the part of the poet. The sweet-briar (*Rosa rubiginosa*) is itself the eglantine. *Rosa lutea* is also known as the yellow eglantine rose, and is a native of Germany and the South of France, being introduced into this country in 1596, a period subsequent to the name occurring in the works of some of the elder poets. By the way, indoor poets, and painters, too, for that matter, sometimes make rather an odd use of flowers in having them inconsistent with their subjects. It is unfortunate, for instance, when spring flowers are painted in an autumn scene, or autumn flowers described in immediate connection with the special beauties of a spring morning. This, however, may justly be considered a little out of my particular province, although it is a point not altogether undeserving of notice. I, therefore, return again to the woodbine and its many sweet associations.

COWPER, speaking of the inspiring delights of nature, pictures to us—

"Her hedgerow shrubs a variegated store,
With woodbine and wild roses mantled o'er."

And in one of his inimitable letters to his cousin, Lady HESKETH, he tells her she shall sit with a bed

of mignonette at her side, and a hedge of honeysuckles, roses, and jasmine.

These remarks may, to some, appear trivial, but they, nevertheless, suggest sweet little pictures of rural life to such as have eyes to see their beauties. CONSTABLE, the artist, who began life as a miller, with his father, used to say: "I love every stile, and stump, and lane in the village, and as long as I am able to hold a brush, I shall never cease to paint them."

THE WAYFARING-TREE.

The Wayfaring-tree (*Viburnum lantana*) is, in reality, a shrub, and grows to a height of about 15 feet. Its leaves are somewhat thick, soft, and velvety, and of an ovate shape, cordate at the base, and downy on the under side. It is a native of Britain, where it is found growing in woods and hedges, chiefly on calcareous soils. When young it grows rapidly; and the long pliant shoots are in Germany used for the purpose of basket-making. The trusses of white flowers which it produces are succeeded by somewhat flat, oval-shaped fruit, which ripens through stages of yellow and red to black, and becomes, when perfectly ripe, a somewhat mealy astringent pulp. In Switzerland this fruit is made into a kind of ink, and

when the shoots are two or three years old they are used for making stems for tobacco pipes.

The wayfaring-tree, by no means beautiful or specially attractive to the generality of people, yet caught the poetic fancy of WILLIAM HOWITT, and was made by him the subject of a little poem, of which the following is an extract :—

“ Wayfaring Tree, what ancient claim
Hast thou to that right pleasant name ?
Was it that some faint pilgrim came
Unhopedly to thee,
In that brown desert's weary way,
'Mid toil and thirst's consuming sway,
And there, as 'neath thy shade he lay,
Bless'd the Wayfaring Tree ? ”

The *Viburnum opulus*, or common guelder rose, is another British species, also a large-growing shrub, reaching, when cultivated, a maximum height of about 12 feet. It is much more ornamental in every respect than the last-mentioned. The leaves are broad, three-lobed, irregular, serrated at the edges, and quite smooth. The flowers are pure white, and much more beautiful on the cultivated plant than when it is in a wild state. COWPER mentions the guelder rose as—

“ Throwing up into the darkest gloom
Of neighbouring cypress, or more sable yew,
Her silver globes, bright as the foaming surf
That the wind severs from the broken wave.”

Although the flowers of the guelder rose are most beautiful on plants cultivated in the shrubbery, nothing can rival the ruby purity of its clustering berries when growing in its native glen. The intermingling tints of yellow, crimson, and purple in its autumn leaves, too, are often exquisitely lovely. This species prefers to grow in swampy thickets in company with briar, hazel, and sloe bushes, where it often is a very striking and attractive object. The wood is sometimes employed in making skewers.

There are a great many species of *Viburnum*, but only the two already mentioned are natives of our own country. *Viburnum tinus* is the *Lauristinus* of the gardens, and is a most beautiful hardy evergreen shrub. The foliage is finely massed, and I have frequently seen plants, in suitable places near the sea, bloom the whole of the winter. It was introduced in 1596, and is a good deal propagated and grown in pots for conservatory purposes. It is a native of the South of Europe.



THE BLACKTHORN.

Though the Blackthorn, or sloe (*Prunus spinosa*), is, in many respects, interesting, it is not a favourite with the ordinary lover of trees. It is, perhaps, only those who have been early familiar with the witchery of our wild tangled glens—loveliest in early spring-time when adorned with primrose and blue-bell—that will be tolerant with it. It delights in the most perfect freedom, and, when left undisturbed, grows and spreads with considerable rapidity. In its natural state it seldom assumes the character of a tree, but the shoots generally run up in dense masses to a height of sometimes 15 or 20 feet. The wood is very hard, rather of a brownish colour, and takes a good polish. It is very apt to crack, so that but little use can be made of it, except for tool handles, or other minor purposes. It makes, however, admirable knotted walking-sticks, which, under the well-known *sobriquet* of “sprigs,” have considerable renown among the bellicose sons of the Emerald Isle, who delight to sing with rollicking bravado the familiar doggerel—

“The sprig of blackthorn I hold in my fist,
Around his big body I made it to twist.”

The simple white flowers, which appear before the leaves, have little or no beauty when compared with those of other members of the same family. They

have, however, their own special charm, which a real lover of nature will always appreciate. GRAHAME, the poet of the "Sabbath," mentions

"The milkwhite sloe-thorn spray
Whose early flowers anticipate the leaf."

Apart from the simple beauty of their flowers, the bushes have a substantial use ; they are rigid and wiry, being well adapted for rough edges, and serve admirably as protection to the stems of trees planted in grass fields and parks where they are exposed to cattle. I have sometimes seen them used for the latter purpose with very tasteful effect.

The fruit of the sloe is black, covered by a delicate bloom or white powder ; and has always been a favourite simile with gushing love-poets when describing the irresistible glance of some dark-eyed enchantress. In one of the Ettrick Shepherd's tales we have an allusion of this kind : " Ah, Wat, Wat ! love winna hide ! I saw a pair o' slae-black een that threw some geyan saucy disdainfu' looks up the kirk, and I soon saw the havoc they were making, and had made i' your simple, honest heart."

The fruit is exceedingly astringent, outrivalling in that respect any of our native fruits. Notwithstanding its exceedingly acerb qualities, I have eaten quantities of it, the thought of which is now almost enough to set one's teeth on edge. COBBETT, speaking

of his boy experiences with the sloe says : " I have eaten them many times until my tongue clave to the roof of my mouth, and my lips were pretty nearly glued together."

Dr. WILLIAM WOODVILLE, in his " Medical Botany," writing on the sloe, says : " The juice obtained from the unripe fruit, and inspissated to dryness by a gentle heat, is the German acacia, and has been usually sold in the shops for Egyptian acacia, from which it differs in being harder, heavier, and more especially in giving out its astringency to rectified spirits." The true Egyptian acacia of the shops is from the plant known as *Acacia nilotica*.

A villanous kind of concoction, as it has been justly called, used to be made, and perhaps is still made, from certain proportions of logwood water, the juice of sloes, and cheap French brandy. This was designated " Port wine! Fine old port!" COBBETT laughs at the whiskered bucks, as he calls them, and their beautifully rough and dry wine that had " a good body," and he humorously adds :— " Little do the bucks, when they are drinking port wine (good rough port), imagine that by possibility for the fine old port, which has caused them so much pleasure, they are indebted to the very stick with which they are caressing their admired Wellington boots!" Among the other nefarious uses to which

the sloe has been put is that of its leaves being used to adulterate tea, and it has been asserted they are the best substitute for that article yet tried.

THE TAMARISK.

“ Amongst the rest, the tamarisk there stood,
For housewives’ besoms only known most good.”

The Tamarisk (*Tamarix Anglica*) though not generally regarded as a native of Britain, is yet tolerably common in an apparently wild state in certain parts of the South of England. It is a plant which delights to grow in moist sandy places near the sea, where its usual height is from 5 to 10 feet. In the most favourable localities, having a soil deep, as well as moist and sandy, it will sometimes reach a height of even 30 feet. In many parts of the Cornish coast it is a good deal used as a hedge plant, growing close to the shore, and standing the sea blast better than most other shrubs or trees. There is a tradition that it was first introduced into the Lizard district by a cartman who, having lost his whip, procured as a substitute one of the long pliant shoots at St. Michael’s Mount, which shoot, after his journey, he stuck into the ground, where it grew and was soon propagated to a considerable extent. It was on St. Michael’s Mount that the plant was first noticed in a wild or seemingly

wild state—for some have supposed that it may have been brought thither by smugglers from the opposite coast of France.

The tamarisk roots very freely, almost as freely as the willow, when planted in sand in the spring or autumn. It is a sub-evergreen, with rich, purple, long, tapering shoots of a feathery appearance. The leaves are minute, like those of a juniper plant. The flowers usually make their appearance in July, and last a considerable time. They are produced in spikes near the ends of the shoots. The whole plant is very bitter. The young growths were formerly held in some repute as a tonic. They have also been used as a substitute for hops in brewing. In old days of superstition the tree was supposed to be *infelix*, or under a kind of malediction, and the branches were, in consequence, made into wreaths to be put on the heads of malefactors.

The tamarisk has a wide distribution, being found in most of the countries of Southern Europe, in Arabia, Japan, and various other places. There are two species from the East Indies, which are sometimes grown in hot-houses. In Arabia the wood is made into saddles for camels, and other articles that are subject to rough usage. We are also told that in Egypt it is used for building and for fuel, and that bowls and drinking vessels are made from it. The Arabian variety is commonly laden with a considerable

quantity of gall-nuts, that at a certain stage are full of a bright, red sap, which is used in dyeing. Perhaps the most singular product of this tree is a kind of manna, usually most plentiful in seasons when copious rains have fallen. BUCKHARDT, speaking of the tamarisk in the account of his journey through the wilderness of Sinai, says of this manna: "In the month of June, it drops from the branches upon the fallen twigs and leaves, which always cover the ground beneath the trees in their natural state. The manna is collected before sunrise, when it is coagulated; but it dissolves as soon as the sun shines upon it. The Arabs clear away the leaves and dirt which adhere to it, boil it, strain it through a coarse piece of cloth, and put it into leathern skins. In this way they preserve it till the following year, and use it, as they do honey, to pour over their unleavened bread, or to dip their bread into. I could not learn that they ever made it into cakes or loaves." The manna of commerce is the product of a tree known as *Ornus Europæa*, and which closely resembles the common ash.

It was against a tamarisk tree that ACHILLES placed his lance before he plunged into the Xanthus after the Trojans—

"But he, the Jove-descended, there on the river's merge,
His lance against a tamarisk leant, and made his furious
charge

On with his drawn sword only, most like a God in might ;
On dreadful deeds his soul was set, and smote he left and
right."

It may interest some to know that among the ruins of ancient Babylon there stands on the north side of the artificial mound, known as the Ksar or Palace, looking down upon the river, a lonely tamarisk tree, short, thick-bodied, and very old. "The Arabs say it is the only tree that remains of the hanging gardens of Semiramis." *

THE BARBERRY.

The common Barberry (*Berberis vulgaris*) is a deciduous shrub, found wild in several parts of England, and grows in hedges and thickets. It is what is termed many-stemmed, is rather slender, and of a rambling habit. When cultivated in favourable situations it will sometimes attain to a height of 20 or 30 feet, and will remain, it is said, for two or three centuries without much visible increase in size. The wood is of a yellow colour, hard and brittle, and little used except for dyeing. The inner bark of both stem and roots is used for the same purpose. The leaves are of an oval shape, beautifully serrated, and the spines with which the shoots are armed are

* GEIKIE. "Hours with the Bible," Vol. 6 (1884.)

in threes together. The yellow flowers that hang in loose racemes are succeeded by small, oblong, reddish fruit, covered with bloom like a plum, and of such an exceedingly acid taste that birds will seldom touch it. For our own part the memories of our boyhood are not charged with thoughts of having neglected even this fruit. The most choice and plump were gathered, their ends pricked with a pin, and the juice sucked out with a degree of relish not to be measured by our present standard. The fruit is also made into jelly and cooling drinks ; and when in a green state is sometimes pickled.

The plant is subject to a particular kind of blight, which was at one time supposed to taint the corn that grew near it. So strongly did this belief prevail that scientific men even advocated its destruction. In consequence of this, the barberry is not so common in our rural hedgerows and thickets as it might otherwise have been. Recent scientific investigation has, however, proved that the orange-coloured mildew on corn, and that of the barberry, are not identical. Although superstitions of this kind are very tenacious in their hold on the popular mind, it is to be hoped that the barberry will, hereafter, be permitted to retain its place as a hedgerow plant, for which it is well adapted.

MR. WORTHINGTON G. SMITH, in his book on "Diseases of Field and Garden Crops," says: "There

is but one way of getting rid of corn mildew, and that is certainly not by cutting down barberry bushes and pulling up borrag plants."

There are several foreign species of the barberry family, many of which are highly ornamental shrubs. Those having an evergreen, holly-like foliage are placed by some botanists in a separate genus, and known as *Mahonia*, but the propriety of such a distinction is questioned.

In connection with the barberry, we are reminded of the beautiful lines of LONGFELLOW :

"Ye, who sometimes, in your rambles
Through the green lanes of the country,
Where the tangled barberry-bushes
Hang their tufts of crimson berries
Over stone walls gray with mosses,
Pause by some neglected graveyard,
For a while to muse, and ponder
On a half-effaced inscription,
Written with little skill of song-craft,
Homely phrases, but each letter
Full of hope and yet of heart-break,
Full of all the tender pathos
Of the here and the hereafter."



THE DOGWOOD.

The common Dogwood (*Cornus sanguinea*) is a well-known native shrub frequently to be met with in hedges and thickets, where it reaches a height of from four to fifteen feet. The leaves are ovate, smooth on both sides, and remarkable for the strength of their spiral vessels. The numerous star-shaped flowers, produced in flat corymbs, are of a somewhat greenish-white, and have rather an unpleasant smell. The fruit is of a blackish hue, very bitter, "not fit even for a dog" it is said. Indeed, one of the many names by which the plant is known is that of dogberry, a disparaging designation given to it probably in consequence of those bad qualities. In winter the plant is easily distinguished by its light, red-coloured twigs; and this is the reason, no doubt, that in some places it is called bloody-twig. It is also called hound's tree. Prickwood is another name by which it is known in consequence of the wood being used to make toothpicks and skewers. In autumn the leaves acquire a particularly bright red, which changes into purple before they fall. The bark is said to taste like apples; but for my own part I am unable to detect any resemblance.

There is another species, similar in habit to the above, and frequently met with in shrubberies, which has a white fruit, and branches longer and of a yet

brighter red. It is known as *Cornus alba*, or white-fruited dogwood. It is a native of Siberia and North America, and was introduced in 1741.

The *Cornus mascula* of the modern botanist is the cornelian cherry-tree or cornal of the ancients, so much celebrated as a wood for making spears. Instance the funeral games described in the fifth *Æneid*, where young ASCANIUS and his companion ride in procession—

“Each brandishing aloft a cornal spear.”

The cornal is a large shrub or low tree, a native of several parts of Europe, and introduced in 1596. The flowers are yellow, the berries scarlet, and the naked shoots, when young, are an ash-coloured green. The wood is remarkably hard and durable, as well as flexible and tough. It is valuable as an ornamental low-growing tree, and flowers early. There are several varieties with variegated foliage, more or less beautiful, according, of course, to special ideas of beauty, which are often somewhat vague.

I like to have a few quotations from WILLIAM COBBETT when there is a favourable opportunity; he deals so heartily about him, and always “draws his arrow to the head whether for a swan or a goose.” Writing of the common dogwood in 1825, he says:—
“Of late years it has been discovered that it makes the very best of charcoal for using in the manu-

facturing of gunpowder ; and, therefore, considering that we have such a thundering standing army, which we cherish with so much assiduity, and of which we have become so very proud, in this age of the wonderful 'march of intellect,' this once despicable plant has now become of importance, and merits at least some degree of our attention." This once despised and detested plant "which was a by-word amongst country people, from whose contempt of it, doubtless, its name arose, is in a fair way of becoming the *premier* amongst the inhabitants of the woods." There you see, according to the common saying, it had not been left, at one time, the "likeness of a dog."



SUITABLE TREES FOR VARIOUS SOILS AND SITUATIONS.

*(From the Transactions of the English Arboricultural
Society.)*

Although trees and shrubs have been a special study of mine for a considerable time, yet it never entered particularly into my mind that I was able to teach others. Quite satisfied in my own opinion that the culture of trees is a very important subject, both in a commercial, a sanitary, and also in a picturesque point of view, I am also thoroughly persuaded that the more general planting of them about our dwellings and homesteads would be of considerable advantage in another way. Nothing, certainly, is more conducive to moral health and refinement than studying the beauties of nature. It is but few, however, that have had the happy privilege of frequently meeting and communing with her in her "coy abodes," and it is to such principally that I would venture to address myself in this Paper.

There can be no doubt, I think, that man naturally loves what is beautiful, and notwithstanding that the pure sentiments and embodiments of grace and beauty are often sadly perverted, we yet instinctively cling to the lofty ideals of pristine perfection and purity; and, according to a kind of philosophy I have long ventured to hold, beauty is nearly related to goodness. In a peaceful community, man invariably shows something of this inherent quality in choosing his place of abode. Other things being equal, he will generally select some sheltered, woody spot, where the prospects are cheerful and pleasing, and where he can have fullest communion with the ever-varying moods and melodies of nature. Not many, comparatively speaking, have, however, an absolute choice in the matter of habitation, but must submit to fix their lot where the force of circumstances directs. About many of our large towns and suburban residences the want of trees is often a sad regret, and it every now and then comes up as a subject of considerable moment how the defect by which it is caused can best be remedied. When a house is built, the subject of planting at once suggests itself in a very practical way; and the usual enquiry is what is best for the purpose? Now, as a builder cannot reasonably be expected to know everything, the question becomes a very essential, as well as a very natural one, and, if judiciously answered and

acted upon, the results of planting would be much more satisfactory than they usually are. It would often, indeed, prevent considerable disappointment if the intending builder were to bestow a little extra thought on his future trees and pleasure-grounds before he allowed any part of the soil of his house-site to be removed. It not unfrequently happens that the excavated material is thoughtlessly deposited in the very place where it should not be, and that some of the best turf and best loam is hopelessly whelmed by it. Although convenience may plead powerfully for this in the first instance, I do assure you that, by-and-by, it tells very heavily against the unfortunate planter. Wherever excavated material is to be deposited, either in mounds, or for the purpose of filling up inequalities of surface, the top soil, if good, should be removed and carefully put aside, so as to be returned to the new surface after the proper formation has been accomplished. It is certainly too much to expect that trees will take kindly to what is often little better than a raw, clay heap, or a heterogeneous compound of refuse. Any extra trouble that may have been taken in the first instance, as has been before hinted, to thoroughly prepare the soil, will be amply repaid afterwards by the superior way in which the trees will flourish. Trees are organized bodies, and their natures must be studied, and their reasonable wants provided for,

before they are enabled to display fully their true character and greatness. Indeed, whatever the kind of soil may be in which you purpose to plant trees, it ought to be put into the best condition possible. If wet, judicious draining will be required. If it is a cold, tenacious clay, then special care ought to be exercised in order to have it thoroughly broken up and exposed to the influence of frost, and, if possible, well mixed with some gritty material in order to keep it open and free. Clay soils, as a rule, are not favourable to the growth of trees, especially in their young state. If the ground has not been well broken up and prepared, so that the wet may pass through it freely, the holes in which the trees are planted become mere cesspools, which are a speedy destruction to the plants themselves.

Hitherto I have had specially in view what may be called domestic planting, or planting as a means of comfort and ornament. As houses are built in almost all kinds of situations, the main question very naturally arises as to what kinds of trees are to be planted so as to insure the most reasonable amount of success. One of the best rules of guidance, as I have said elsewhere, certainly is to observe what sorts of trees grow best in the immediate neighbourhood ; and not only that, but to note carefully what are the various conditions under which they grow. It is wonderful what valuable practical lessons may be got in this way by

simply keeping an intelligent eye upon what is going on. It not unfrequently happens that Mr. SMITH cannot understand why his trees are doing so ill, while those of Mr. ROBINSON over the hedge are thriving admirably. No doubt some very sufficient and satisfactory reason might be assigned for such a state of things, but it is not my present purpose to seek it out. Perhaps Mr. SMITH is one of those who possesses a special knack for getting bargains, and which, strange to say, very often result in a way adverse to what was intended. Generally speaking, I am not an advocate for having trees on what is vulgarly called "the cheap," particularly if they have not sufficient intrinsic worth for the purpose intended. Cheapness against worth is seldom good policy in anything, and particularly in trees.

Next to a well-prepared soil the suitability of the plants should be considered. This implies some special knowledge of tree life, or what the learned call phytonomy. I dare not take upon me to enter so vast a field of enquiry, but barely to notice, as it were at a distance, one or two points, in order to illustrate what I would like to be at. It is the privilege, and doubtless one of the advantages of society membership that, by an interchange of ideas, each may benefit the other, and the general capital of information increased. Exercising, therefore, my social right in this respect, I shall proceed to place

before you one or two considerations respecting the choice of young trees suitable for planting.

I shall take an extreme case first, and suppose the place to be planted is very exposed. It is already a recognised fact that trees in small quantities can only with difficulty be established in cold, open situations ; but, when once they have become established, they seek to protect themselves in a very remarkable way. It will be observed that such trees as have been inured to hardship by being freely exposed to the natural elements are much thicker in the bark, have shorter jointed growths, are denser in twigs and foliage, and, in fact, much more roundly furnished and compacted in every way than those that have been reared in close, confined situations. Their root action, too, will pretty generally correspond with what takes place above ground, and the whole plant will possess what Sir HENRY STEWART would have called good wind qualities. Now, seeing these qualities are brought about by the force of circumstances acting in a natural way, it ought to furnish us with valuable hints as to how we ought to proceed in any artificial undertaking of the kind. Therefore, I hold that all young trees intended to be planted in exposed places should have as many of the above recommendations as possible. These, along with a carefully prepared soil, will go a long way towards achieving success in the rearing of trees. It is not,

however, all that may be done. Shelter, for instance, is always a very essential thing, and much may be accomplished in this way by a little forethought and care.

It is, in my opinion, always advisable to plant thickly at first. Any extra outlay in the purchase of trees will be ultimately compensated by a better choice of subjects, and a speedier and more luxuriant growth. Trees thickly planted shelter each other until such times as they become thoroughly established, and more able to look after themselves. Those intended to be permanent should be planted well apart, and the intervening spaces filled up with the commoner kinds of various sizes, which ought, in due time, to be cut out. It will always be advisable, at the outset, to plant such evergreen and deciduous shrubs as may be necessary to furnish the ground, and, at the same time, add a little variety, reserving, of course, all the most appropriate places for specimens of the choicer kinds. Every kind of undergrowth will help to maintain warmth in the ground, and, if kept within proper bounds, will be an advantage to the trees generally. Of course, where trees are very young, care must be taken that a rank vegetation does not overrun and destroy them.

It will be apt to be judged from what I have already said, that I hold to the opinion that almost any of our native forest trees will grow fairly well

under ordinary circumstances. Some will, no doubt, do better in certain situations than others ; but the difference for general purposes is not by any means so great as is sometimes supposed. I have observed very fine specimens of most of our common trees in an ordinary mixed plantation. In extensive areas, there is almost certain to be a considerable diversity of ground, and the shrewd and intelligent planter will take advantage of this, and apportion his trees accordingly. It is a strange fact that, out of the great number of trees planted, comparatively few rise to high distinction ; or, as a humorous political nurseryman said to me one day, as we were looking at a fine brake of young sycamores : "they cannot all become Gladstones."

Since I commenced, this paper has grown so rapidly on my hands that I find a great many things must remain unsaid. Without in any way ignoring the commercial advantage of tree planting and culture, I must confess I have considerable sympathy for that minor class of planters who only seek to make their homes beautiful, and plant trees because they admire and love them. I am almost inclined to place a real lover of trees as high on the celestial ladder as dear old ISAAC WALTON placed that of an angler. What would the cottage and the "stately homes of England" be without their "tall ancestral trees?" Who does not admire them clustering the

wide domain, or fringing with picturesque loveliness our sweet mountain glens ?

It may be thought, perhaps, that I have wandered too far from the text, and not given the subject matter sufficient prominence. But this is more apparent than real. I have, indeed, faithfully endeavoured to keep the main object steadily in view, only, instead of pursuing the hard, monotonous highway, I have chosen the green fields and fairy pathways, and have plucked a simple wild flower here and there to gratify my friends.

Presuming that what has been already said concerning the preparation of the soil, the choosing of the plants, and the shelter when young, has been duly approved of, there is yet another very material point bearing indirectly upon "Suitable Trees for various Soils and Situations," and that is indiscriminate pruning. Many trees possessing excellent preservative qualities when first planted, are afterwards almost completely destroyed by being ruthlessly subjected to a kind of denuding process. This often proceeds from sheer ignorance of the first principles of vegetable physiology, and a mistaken idea that because a little pruning is good for a plant, ten times the amount is good also.

I have in my mind's eye at the present moment a quantity of young trees planted for picturesque purposes, and possessing many excellent qualities

fitted to resist exposure, that have been rendered mostly hide-bound and stultified by this inconsiderate treatment. Some people seem to have about them a kind of old Dutch idea that nature ought to have made all her trees of some formal pattern; and, in order that the mistake might be rectified, those I have just mentioned have been diligently dressed-up into broomsticks, and now stand ghost-like, "bare and trembling at themselves," while, doubtless, some other cause will be assigned for their present lean and meagre appearance.

What I am going to say next pertains more, perhaps, to the province of the *bonâ-fide* forester than the amateur planter. I am conscious that I am now about to speak to my masters who know more of the subject than I do myself, only, as it may perchance be of interest to tree-loving people in general, I do not hesitate.

A plantation of some eight or ten acres, having somewhat of a northern aspect, and consisting chiefly of sycamore, ash, elm, with a few Scotch fir and larch scattered among them, was in a tolerably thriving state. They were upwards of fifteen years planted, but had been neglected during that time. The trees suffered for want of thinning. A vigorous start was eventually made, when fully two-thirds of them were knocked out, and the remainder trimmed up in what was regarded the true orthodox fashion. It

was reckoned a good stroke of business. The result may easily be imagined. The trees were utterly starved, and retarded in their growth for years to come.

Success in tree planting depends a good deal on a happy combination of circumstances. Almost any of our ordinary forest trees will grow in good soil, provided they have a little shelter during their young state, or until they are up and able to protect each other. Perhaps one of the most accommodating of our native forest trees is the common wych elm. It grows in almost any kind of soil or situation, and bends freely to the blast. The roots are far-reaching, and very tough, so that from the first, the tree takes a strong hold of the ground, and is seldom blown down.

In my opinion, the wych elm and its varieties are excellent trees to plant about a town. The ash is also an excellent and useful tree on a good, loamy soil, but does not like exposure. The sycamore, "capricious in attire," is a favourite town tree, and stands the wind well when thoroughly established. It prefers a somewhat light, deep, strong, or rough, sandy soil, not over moist. It stands the sea-air tolerably well, too, and is always a special favourite when a full-grown tree. I have seen it growing admirably among the soily rubble of an old freestone

quarry ; and it is often a special ornament to the little hamlet and quiet homestead.

The beech, I think, has not been planted so extensively in recent years as it ought to have been. It is a beautiful object when young, and, when full-grown, is one of the stateliest of trees. It prefers a sandy loam, and does well upon the slopes of hills that have a calcareous sub-soil. The beech makes a capital hedge-plant, and is a good deal used for the purpose of shelter. The hornbeam is a tree remarkable for growing well on cold, barren, and exposed hills, and on cold, stiff clay, where few other trees will thrive. It also makes a good hedge for shelter. In warm and sheltered situations, having a rather moist soil, the horse chestnut makes a fine, attractive tree, and is a most beautiful object when in flower. There are several kinds if we include the *pavias*, which are almost identical. The various sorts of poplars, too, are very accommodating, but always prefer a moist ground, near water. They grow rapidly, and are good nurses to other trees. The balsam poplar will always be welcome on account of the deliciousness of its smell in early spring-time. The alder is also a moisture-loving plant, as are also most of the willows. Among the smaller growing trees, not particular as to situation, provided the soil is free, may be mentioned the mountain ash and the

white beam or service tree, both well adapted for small areas in front of windows.

The lovely little hedge maple is not planted so much as it ought to be. It will thrive almost anywhere, and has always a cheerful look. The laburnum is another small growing tree not particular as to where it is planted, and its exquisite bunches of pendent yellow flowers will always secure it a place. The oak and the English elm, two of our most grandly picturesque trees, will not be neglected on a good stiff soil, for that is where they flourish best. The Turkey oak is a ready grower, and a good tree for ornamental purposes. Of course the English oak is what we would plant for timber.

In open, rich, sheltered situations few trees are a more beautiful ornament to a park than the lime or linden. It soon assumes an easy and well-balanced habit, and the sweet scent of its flowers is an additional attraction. The peaceful, river-side village is often a home for fine specimens of the lime.

There are a great many deciduous trees I should liked to have mentioned in connection with "various soils and situations," but the space at my disposal forbids. What remains must now be classed under one general head of ornamental trees, for which special provision is to be made. Let soil, shelter, and the quality of plants be carefully attended to,

and the chances of success in tree culture will be increased to an infinite degree.

Before concluding, however, I must crave leave to say a few words about coniferous trees, particularly the larch, Scotch, spruce, and silver firs, all of which are intimately associated with high, hilly districts and river slopes. Although we call the larch a surface-rooting plant, it appears to grow best in a deep, clayey gravel—a soil, by the way, well adapted for oak ; indeed, the two trees, along with the Scotch fir, may sometimes be very profitably grown together. The Scotch fir, however, is the tree best adapted to poor, moory soil. An alluvial soil, in a low situation, is most suited to the silver fir, where it often grows to a large size. The spruce will generally thrive in a soil suited to the larch. Where circumstances are favourable, I prefer a mixed plantation, not, be it understood, where trees are arranged with the regularity of a chess-board, but where advantage has been taken of the varied character of the ground. A loose, deep earth will grow trees of almost any description ; but, where it is thin and barren, they must be selected accordingly.

It is sometimes very difficult to get trees to grow near the sea, not so much on account of the soil, perhaps, as the cold, stormy blasts which prevail, particularly on the east coast. I have, however,

known pretty extensive plantations got up, and pleasure-grounds furnished in such places, principally by the extensive use of common elder hedges, which were run at intervals across the most exposed points. They do not resist the blast altogether, but grow rapidly, and soon recover themselves when cut down. Brier, bramble, willow, whin, broom, sloe, and such like are all useful to form a thicket against the influence of those blighting sea winds. They form the basis of shelter (which is always the most difficult part), and, when sufficiently broad, the winds are tempered to the tender trees, and carried higher and higher until they pass harmlessly over.

As a parting word, I should like to counsel my friends who take an interest in the culture of trees, against the baneful practice of indiscriminate delving amongst them. Much irreparable damage is often done in this way. The facts are very plain. The roots of healthy trees, in a suitable soil, permeate in every direction, and gather material necessary to the proper support and development of the plant. It is quite evident, then, that the roots near the surface will be considerably damaged and destroyed by so improper a use of the spade, and the trees themselves will ultimately become stunted and unhealthy; in fact, they run a great risk of being regarded as trees *not* suitable for the soil or situation.

To recapitulate, in a brief way, a few of the points already mentioned, may not be without advantage in assisting to arrive at a clear understanding of the subject. I shall set them down merely as they occur to my mind, without regard to any formal method.

I shall mention the tree first, and then the soil and situation most suitable.

LIME.—Rich, clayey loam and alluvial grounds, near the margins of rivers.

SYCAMORE.—A somewhat dry, rich, gravelly loam; stands the winds well when thoroughly established—a very desirable tree.

HOLLY.—Almost in any kind of soil or situation; but best in a rich, sandy loam, not too wet.

ASH.—A good, free loam, having a mixture of gravel.

ELM.—Very accommodating, and will grow in almost any kind of soil, and has great power of occupancy; a deep, rich soil, however, is the best.

WALNUT.—A deep, stiffish dry-bottomed loam, in a sheltered but open situation.

WILLOW.—A rich, moist soil; good for shelter.

POPLAR.—A moist, rich soil, but not necessarily deep.

ALDER.—Good, well-watered, but not stagnant soil.

OAK.—A deep, strong loam, or good, gravelly clay.

HOLME OAK.—Deep, dry soil; a good sea-side plant, but somewhat difficult to establish.

BEECH.—A dry, calcareous soil, or a good loam mixed with sand or gravel.

SPANISH CHESTNUT.—Medium loam.

HORNBEAM.—Thrives best on soil of an adhesive nature; and is, perhaps, the best tree adapted to cold, clayey districts.

HORSE CHESTNUT.—Deep, fine loam, in a sheltered situation.

THORN.—Best in good, strong loam, not too wet.

PINASTER.—Deep soil, of a light, sandy nature; stands the sea-air well.

SCOTCH PINE.—A somewhat sandy or moory loam, having a broken or shattered bottom; a soil also suitable for birch.

SPRUCE (common).—A loamy and deep soil towards the foot of hills.

SILVER FIR.—Low, alluvial situations, where it is cool and moist.

LARCH.—A good, clayey gravel, with a firm sub-soil.

CEDAR.—Best in gravelly or sandy loam; not too wet.

YEW.—A similar soil, but will stand more moisture; must not, however, be stagnant.



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